

A Grammar of Old English

In memoriam B.M.H.S., C.E.B., N.H.

A Grammar of Old English

Volume 1: Phonology

RICHARD M. HOGG

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Preface

This present work is intended as the first of two parts of a contribution to the study of Old English phonology and morphology. Here I deal only with the phonological aspects; the second part will deal with the morphological aspects.

Like many of my predecessors, I do not expect, or even hope, that this present book will supersede those already written. But in the last quarter of a century, since the publication of Campbell's *Old English Grammar* and the third edition of Sievers-Brunner's *Altenglische Grammatik*, there have been major developments of both an empirical and a theoretical nature which have considerably enhanced our understanding of the linguistics of Old English and, perhaps, made the publication of this present book, which tries in some small way to reflect these developments, not unnecessarily premature. One might mention as examples the *Dictionary of Old English* project initiated by Angus Cameron at Toronto, the massive work on Old English syntax by Bruce Mitchell, and, on the theoretical linguistic side, the development of generative linguistics in its several forms.

At this point it may be worth making a few remarks on the so-called philology–linguistics debate, or, if one prefers, the debate between empirically oriented and theoretically oriented scholars, especially as this debate has been strongly focused on Old English by, for example, the discussions in Mitchell (1990a, 1990b). At the risk of seeming appallingly faint-hearted, I cannot help but confess that I do not always find the debate helpful: data, it is true, cannot be validated except in a theoretical context; but nor can a theory be validated except by the examination of data. Whether the chicken came before the egg or vice versa is rather less important than the acknowledgement that the two have a necessary, symbiotic relationship. It is my hope that the reader will observe at various points in this book a sufficiency of instances to confirm the truth of this claim. Furthermore,

I have attempted to take in this work a positive, but conservative, approach to current linguistic theory. The result is that although I make reference to such current theories as non-linear phonology, or, more generally, to generative theory as a whole and to sociolinguistic theory, I prefer to take as my foundation phonemic theory, so that issues are not muddled by theoretical squabbles. In this way I have attempted to allow the reader to determine for himself or herself his or her own conclusions.

Whether this work differs from its predecessors in any of the above respects, I would not wish to say. However, I hope that readers will note that there are other differences, for example the greater emphasis on Late West Saxon than on Early West Saxon, for which the arguments have been well rehearsed elsewhere and need no repetition here. I have tried also to give a slightly greater emphasis to the non-West Saxon dialects, although that, of course, is not always possible given the dominance of West Saxon in our extant texts. I have not, however, attempted to give any systematic treatment of poetic texts, whose phonology and morphology, I believe, are best tackled after the elementary facts have been studied.

This book could never have been written without the help and encouragement of many friends and colleagues, but my main debt, of course, is to my predecessors, such as Brunner, Bülbring, Campbell, Girvan, Luick, and Sievers. But not merely to such as they, also to the many students of individual texts, for example, Brown, Cosijn, Lea, Lindelöf, Zeuner, and those who have followed in later years, most obviously J.D. Pfeifer and J.B. Wynn.

But I owe more personal debts too. Firstly, to Angus McIntosh, John Anderson, O.K. Schram, and David Tittensor, who introduced me as an undergraduate at the University of Edinburgh to the study of Old English. They encouraged me also to write this book, and if it had not been for their encouragement, and also that of Barbara Strang, C.E. Bazell, Stan Hussey, Sir Christopher Ball, and Roger Lass, I might never have undertaken the enterprise.

Secondly there are those who have commented on parts of this manuscript in one or more of its forms: those whom I have already mentioned and others also: Fran Colman, Martin Durrell, Elan Dresher, Jacek Fisiak, Dorothy Horgan, Chris McCully, Patrick Stiles. Thirdly, there are those with whom I have corresponded or whose brains I have picked informally. They, alas, are too many to mention here, except that I cannot refrain from noting the help of the scholars at the Toronto *Dictionary of Old English* project. It is a source of regret to me that I cannot offer this book to Angus Cameron and Ashley Crandell Amos, but at least Toni Healey can accept my thanks on their behalf and on her own. Fourthly, I have had the benefit of help from many colleagues at Manchester. Brian Cox and David Palmer would not pretend to a primary interest in Old English studies, but I am

all the more grateful to them for their advice and support. David Denison and Nigel Vincent have helped in many more direct ways, and my other colleagues have given me support in measures greater than I could have expected. Maxine Powell, Alison Weldrick, Mary Syner, and Shelagh Aston have exercised a degree of control and efficiency over my affairs which I could never have exercised myself, in addition to their invaluable help in the production of this book.

At the publishers, Philip Carpenter has both encouraged and exhorted me, with a degree of patience he must surely have found difficult to sustain. At home Margaret, Daniel, and Robert have shown a discerning lack of interest in Old English studies, but yet given me that loving environment which has made the production of this work both easier and more enjoyable. If I had not posthumous debts to pay, this book would surely have been dedicated to them.

Richard Hogg

List of Abbreviations

General

Angl	Anglian
C	consonant
EGmc	East Germanic
eME	early Middle English
eNbr	early Northumbrian
eOE	early Old English
EWS	Early West Saxon
Ger	German
Gmc	Germanic
Got	Gothic
Grk	Greek
IE	Indo-European
IGmc	Inland Germanic
IPA	International Phonetic Alphabet
Kt	Kentish
INbr	late Northumbrian
Lat	Latin
Li	<i>Lindisfarne Gospels</i>
lLat	late Latin
IOE	late Old English
LVD	<i>Liber Vitae Dunelmensis</i>
LWS	Late West Saxon
MCOE	<i>Microfiche Concordance of Old English</i> (= Healey and Venezky, 1980)
ME	Middle English
Merc	Mercian
ModFris	Modern Frisian

N.	northern
Nbr	Northumbrian
NGmc	North Germanic
NMerc	North Mercian
NNbr	North Northumbrian
NSGmc	North Sea Germanic
nWS	non-West Saxon
OE	Old English
OED(S)	<i>Oxford English Dictionary</i> (and <i>Supplement</i>), see References
OFris	Old Frisian
OHG	Old High German
ON	Old Norse
OSax	Old Saxon
PDE	Present-day English
PrGmc	Primitive Germanic
Ru1	<i>Rushworth Gospels</i> (Mercian portion)
Ru2	<i>Rushworth Gospels</i> (Northumbrian portion)
S.	southern
Scand	Scandinavian
SE	south-eastern
SNbr	South Northumbrian
V	vowel
WMerc	West Mercian
WS	West Saxon

Special

a	aanmerking (in citations of Dutch texts)
A	Anmerkung (in citations of German texts)
n	note (in citations of English texts)
†	form not found in MCOE
>	develops to
<	develops from
⊃	is a member of
*	reconstructed or hypothetical form
**	form not known to occur in Old English

Grammatical

a.	adjective
acc.	accusative

comp.	comparative
dat.	dative
fem.	feminine
gen.	genitive
imp.	imperative
ind.	indicative
inf.	infinitive
infl.	inflected
instr.	instrumental
loc.	locative
masc.	masculine
n.	noun
neut.	neuter
nom.	nominative
pa.	past
part.	participle
pl.	plural
pr.	present
pret.	preterite
pron.	pronoun
sb.	substantive
sg.	singular
str.	strong
subj.	subjunctive
superl.	superlative
v.	verb
wk.	weak
1sg., 2sg., 3sg. etc.	first person singular, etc.

Introduction

1.1 The term ‘Old English’ is the usual current term for the historical period of English beginning with the first settlements of people speaking a Germanic language and ending about fifty years after the Norman Conquest.¹ This term is to be preferred to ‘Anglo-Saxon’, see OED Anglo-Saxon,^{2,3} Sweet (1871: v), Campbell (1959: §1n1). The period covered by Old English, therefore, is approximately 700 years (from *c.*425 to *c.*1125). Within this span there is a clear-cut division between the pre-textual or prehistoric period and the textual or historic period, with the first textual records appearing from about the beginning of the eighth century. For further chronological divisions see the discussion in §1.4.

¹ Standard handbooks on the topic of the present works are: Brunner (1965), Bülbring (1902), Campbell (1959), Girvan (1931), and Luick (1914–40) (the last deals with phonology only, the others deal also with morphology). Other important, but less full, works include Pilch (1970), Quirk and Wrenn (1957), and J. Wright and Wright (1925).

² However, the OED sense IB of Anglo-Saxon, that is the southern (WS and Kt) dialects of Old English as opposed to Anglian for the northern dialects, has nothing to commend it and is avoided here.

³ For the term ‘Anglo-Saxon’, see further Malone (1929).

1.2 The English-speaking area of Britain during the Old English period naturally varied somewhat over the years. Generally speaking it may be said to have covered the whole of present-day England excluding Cornwall but together with Scotland south of the Forth–Clyde valley and with Offa’s Dyke as its western boundary with Wales. Naturally not every part of the country within these definitions would have been exclusively, or, in some cases, at all, English-speaking, but the large majority of these areas would have been dominated by English, and all would have had the potential to be so dominated. For further details of the geography of Anglo-Saxon

2 Introduction

England see Hill (1981), whilst Stenton (1971) is the most authoritative general history of the period and country. For discussion of geographical (dialect) variation in Old English, see §§1.5–12 below.

1.3 English belongs to the Germanic branch of Indo-European. Conventionally the Germanic languages have been divided into three groups: East Germanic, North Germanic, and West Germanic, and English is there considered to be part of the West Germanic group. However, such a division is difficult to sustain in a rigid manner, both on grounds of general theories of linguistic development and on the basis of the characteristics of the various Gmc languages. Amongst various theories which have been widely espoused,¹ perhaps the most probable is that the first major separation of the Germanic languages saw the emergence of East Germanic, in particular, Gothic, between the second century BC and the second century AD. The remaining (North–West) Gmc dialects retained some unity and shared innovations for some time after that, but probably by the end of the fourth century, the major separation of these dialects into North Gmc (that is, Scandinavian languages), Inguaeonic or North Sea Gmc (OE, OFris, OSax), and Inland Gmc (High German) had taken place. The often-supposed unity of North Sea and Inland Gmc as West Gmc (that is, in opposition together to North Gmc) is not easy to establish, although the geography of Gmc settlements speaks to some extent in its favour. In this work we shall group the various Gmc dialects under the terms: (1) Gothic; (2) Scandinavian Gmc; (3) WGmc. However, where we are dealing with phenomena that are exclusive to the group containing OE, OFris, and OSax, we shall use the term N(orth) S(ea) Gmc (in contrast to I(nland) Gmc) as an alternative classification to WGmc, without any implication that NSGmc is a later development of a previously united WGmc.

¹ For a detailed account of current thinking concerning the dialects of Gmc and their development, see Kufner (1972). Prokosch (1939: 25–34) remains useful on the same topic. Much remains unclear and uncertain, but it can safely be stated that a simple tripartite division of Gmc according to the *Stammbaum* model (into EGmc, NGmc, WGmc) is untenable on both theoretical and empirical grounds.

1.4 In dealing with a stretch of language over 700 years, it must firstly be recognized that there will inevitably be structurally significant changes during that period. An initial division of OE is possible as follows. Firstly, **prehistoric** or **proto-OE**, namely the period for which we have no, or no significant, textual material. This period stretches from the first settlements in the fourth century to *c.*700. It is generally held that the principal OE sound changes, such as breaking, palatalization, *i*-umlaut, etc., belong to this period, but it is clearly the case that other changes, such as smoothing and back umlaut, are partly in this period and partly in the next, and there

are other important changes, such as the varied development of diphthongs, which belong in large part to later periods. Secondly, it is noticeable that the characteristics of the earliest texts are often quite different from those of a later time, notably in the lack of a stable, general orthographic system. Such texts may be grouped together under the rubric of early OE, *c.*700–900, or, rather, up to and including the time of the Alfredian texts, see §1.10. Thirdly, there begins to emerge in the latter part of the tenth century a written standard language or *Schriftsprache* with a stable orthographic system. The *Schriftsprache* is most obviously associated with the works of Ælfric, see §1.10, but is more generally found, and it may be taken as the basis of a **standard** or **classical** OE, extending for about the last hundred years before the Norman Conquest. Finally there is the period when the OE scribal and orthographic traditions are beginning to break down, even if the language is still characteristically OE rather than ME and the traditions of the *Schriftsprache* are still evident. This period may be termed that of **transitional** OE, although it is often taken together with the immediately preceding period as **late** OE.¹ It should be noted that the above divisions are made here entirely in terms of scribal and orthographic practice, but it is possible to associate the periods also with varying linguistic structures, particularly, perhaps, the status of inflexions.²

¹ For the status of texts belonging to this transitional period see Clark (1970). C. Sisam and Sisam (1959) and Vleeskruyer (1953) also provide important discussions in the introductory material to their editions of transitional texts.

² Thus we may characterize proto-OE as the period when inflexions, especially inflexional vowels, were maximally differentiated; in early OE the front vowels of unstressed syllables (and hence inflexions) were beginning to merge; and in classical OE we can trace a gradual merger of the back unstressed vowels; finally in transitional OE all unstressed vowels are merging. Such a division is, of course, highly schematic, and hides, for example, differences between dialects or even individual texts. On the other hand, it shows that the suggestion of Malone (1930) that Middle English begins *c.*1000 is based on the false assumption that OE is to be characterized, following Sweet (1874: 620), as the period of full inflexions as against ME, the period of levelled inflexions.

1.5 The origins of the dialectal diversity of Anglo-Saxon England have been the subject of much dispute, see for full references DeCamp (1958), Samuels (1971). Some of the difficulties of the division of Gmc referred to in §1.3 stem from variation within and overlap between Gmc dialects, and therefore it is natural to assume that some distinctive dialect characteristics of OE had their origins on the Continent rather than in Britain. On the other hand the tradition which stems from Bede of a tripartite division at the time of the settlements into Angles, Saxons, and Jutes must be regarded warily, see Hogg (1988) *contra* Campbell (1959: §5). The differentiation of dialects during the OE period must have been a continual process, with the differences being at least equally a result of linguistic circumstances

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within Britain. For contrasting views on this topic see again DeCamp (1958), Samuels (1971).

1.6 It is traditionally assumed, for example in Campbell (1959: §6), see also Crowley (1986), that there are in OE four distinct dialect areas: Northumbrian, Mercian, Kentish, and West Saxon.¹ Of these Northumbrian and Mercian may be classed together as Anglian, Kentish and West Saxon as Southern, and the agreement of Northumbrian, Mercian, and Kentish against West Saxon may be abbreviated as non-West Saxon. In this work too that general classification is used, subject to minor modifications, see below. However, it is important to recognize that it is open to several major caveats and objections. Firstly, it is well known that these dialects refer only to actual linguistic material, and therefore there are large areas of the country, most obviously East Anglia, about whose dialect status we cannot know directly from OE evidence.² Secondly, the nomenclature adopted is derived from political structures whereas most of the writing we have is to be more directly associated with ecclesiastical structures.³ Thirdly, the type of approach which leads to the above division is a product of the *Stammbaum* and its associated theories, whereas modern dialectology, either synchronic or diachronic (as in McIntosh, Samuels and Benskin, 1986), demonstrates that such a rigidly demarcated division is ultimately untenable. It would be preferable to consider each text as an ‘informant’, see McIntosh, Samuels and Benskin (1986: 1–28), which is more or less closely related to other texts on an individual basis, with the classification of texts into dialect groups being viewed as a process determined by the purposes of the linguistic analysis at hand, rather than as some a priori fact, for further discussion see Hogg (1988). The use here of the traditional classification, therefore, is a matter of convenience (essentially in the question of reference to other work).⁴

¹ For further minor subdivisions see §§1.7–10.

² For the ME dialects and their relation to OE see Jordan (1974), McIntosh, Samuels and Benskin (1986).

³ This, of course, is because the majority of texts which we have originate from ecclesiastically run scriptoria. It is tempting, therefore, to suggest an alternative classification based on dioceses, where Northumbrian = Durham and (?)York, Mercian = Lichfield and (?)London, Kentish = Canterbury, West Saxon = Winchester. The objections to this are obvious, but in essence no more powerful than those to the traditional names, see further Crowley (1986).

⁴ See also Luick (1914–40: §19).

1.7 Although geographical definitions are particularly elusive for the OE period, the Northumbrian dialect may be broadly identified with an area north of a line from the Mersey to the Humber. Amongst the early texts there can be especially noted the Moore and Leningrad mss. of *Cædmon’s*

Hymn (c.737, 746), which are unambiguously linked with Bede. Of much the same period and also clearly Nbr is the runic inscription on the Ruthwell Cross,¹ whilst the runic inscription on the Franks Casket (the Auzon Rune), which is certainly no later, is not localizable on non-linguistic grounds, although linguistically it is certainly Nbr. Slightly later than these, probably ninth century, are *Bede's Death Song* and the *Leiden Riddle*. Other early texts which provide some evidence of Nbr are the Latin mss. of Bede's *Historia Ecclesiastica*, in which there are many OE names, and the names of benefactors in the *Liber Vitae Dunelmensis*, texts of the eighth to ninth centuries. There are difficulties in using the evidence of names too freely, see Campbell (1959: §7), and here such evidence is only cited when of special interest. For later Nbr the most important texts are the interlinear glosses to the *Lindisfarne Gospels*, the *Durham Ritual*, and the *Rushworth Gospels*. The former two were written by Aldred, a priest at Chester-le-Street (Co. Durham), and are probably of the second half of the tenth century. The *Rushworth Gospels* were written only slightly later 'æt Harawuda',² probably Harewood (Yorks.) by two scribes, Farman and Owun. Only that part written by Owun, that is, Mark except I-II.15, Luke, and John except XVIII. 1-3, is Nbr. Owun's text is usually described as *Rushworth*² (Ru2), in distinction to the Merc part, see §1.8. Ru2 is clearly distinct from the other lNbr texts, and is often described as South Nbr, after Lindelöf (1893, 1901); the other texts, therefore, being North Nbr.^{3,4}

¹ As Ball (1988) points out, it is unsafe to place primary reliance on the Ruthwell Cross for the identification of Nbr, *contra* Campbell (1959: §6). For a full study of this inscription see now King (1986).

² But this may simply mean that the scribes, Farman and Owun, were based at Harewood. It seems more likely that they wrote the glosses at Chester-le-Street, see Ross (1981: §11).

³ It is extremely difficult to place the eNbr texts within this North-South dichotomy, and the temptation should probably be resisted.

⁴ Major works of reference for the Nbr dialect are cited in Campbell (1959: 360-2).

1.8 Mercian is the least well defined of the OE dialect areas, and indeed the term hides a degree of linguistic variation rather greater than elsewhere. Its use is normally as a cover term for texts which may be supposed to originate from somewhere south of the Nbr area, but see below, and north of the Thames. The earliest of the Merc texts are the *Épinal* and *Erfurt Glossaries*, both of the first half of the eighth century,¹ and associated with these is the *Corpus Glossary*, probably late eighth century. Of these, *Épinal* consistently has the more archaic forms, whilst *Erfurt*, written by a German scribe, is prone to error and the least reliable. There is some scattered evidence to suggest that all three texts, presumably by virtue of the same archetype (although the relationship is complex), have some elements of a

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more southerly dialect, either WS or Kt. The question is quite unsettled, see, for example, Pheifer (1974: §90), Wynn (1956: §§175–81), although it would not be unreasonable to consider the texts as South Merc. Markedly different from these glossaries is the interlinear psalter gloss, the *Vespasian Psalter* (Ps(A)). Ps(A) seems most probably to have been written by a Kentish scribe at Canterbury from a Merc original, which we may presume to associate with Lichfield, the result being a remarkably accurate copy of the original.² The association with Lichfield and consequently with some eME texts of the West Midlands, that is, the ‘AB dialect’ texts, points to a West Merc classification of this text. The third major Merc text comprises those parts of the *Rushworth Gospels* written by Farman, namely Matthew, Mark I–II.15, and John XVIII.1–3, usually known as *Rushworth*¹ (Ru1). It is impossible that Farman and Owun both came from Harewood, since the dialects of Ru1 and Ru2 are clearly distinct. Assuming that Owun was a Yorkshireman, or was writing in a Yorkshire (SNbr) dialect, it would be plausible to suggest that Farman was non-native and came from somewhere further south. Since the dialect of Ru1 is often distinct from that of other Merc texts and provides a link between Nbr and Merc, it might usefully be classified as North Merc, see Bibire and Ross (1981).³ There are a number of other minor Merc texts, such as the *Blickling Psalter* and the *Lorica Glosses and Prayer*, and the recently discovered Med 5.10 (Schaumann and Cameron, 1977). More securely localized are the partly English Ch 190 (Hanbury, Worcs.) and the wholly English Ch 204 (Wotton, Bucks.). For the transitional period there is the valuable LS 3 (Chad), see Vleeskruyer (1953).^{4,5}

¹ The dating of these mss. has long been controversial, but it would seem most probable that *Épinal* was written *c.*725, *Erfurt* slightly later and *Corpus* towards the end of the eighth century, see Chadwick (1899), Pheifer (1974: §88), Bischoff and Parkes (1988), and, for an older expression of the same relative chronology, but with an earlier absolute chronology, Sweet (1885: 2–3). Contrary views may be found in Campbell (1959: §12) and, albeit hesitantly, Wynn (1956: §182).

² The dialect of Ps(A) has aroused much controversy. For the early history of this see Sweet (1885: 184). Sweet’s earlier view that the text was Kt is reflected in Zeuner (1881) and even as late as Wilson (1959). Kuhn (1965: v–vi) argues for a purely Lichfield origin, whilst Campbell (1967: 82) suggests it was glossed at Canterbury by a Merc scribe. The view expressed here follows Ball (1972).

³ A further confusion follows from the fact that in Ru1 Farman uses a number of forms which are typically WS, such as *ǣ* for *ǣ*₁, *eall* ‘all’ against *all*. Such forms have a tendency to be restricted to more common words and would suggest that they were learned by Farman at a WS(-influenced) scriptorium, rather than being native to his dialect.

⁴ It should be emphasized that the geographical distinctions made here between varieties of Merc are primarily intended as an indication of the non-homogeneous character of Merc. The status of Merc is one which remains doubtful and which must therefore be treated with suspicion, see Hogg (1988).

⁵ Major works of reference for the Merc dialect are cited in Campbell (1959: 359–60, 362–3). Note additionally: Brown (1969), Mertens-Fonck (1960), Pheifer (1974), Schaumann and Cameron (1977), and Wynn (1956).

1.9 Although geographically and probably also textually the smallest of the dialect areas, Kentish provides considerable problems for the dialectologist, see Crowley (1986: 103–4). Material before the ninth century is restricted to names in Lat charters, and only from about 805 do charters principally in English begin to appear. Charters of the first half of this century include those numbered 34, 37, 40, 41 in Sweet (1885) (= Ch 41, 1188, 1197, 1482); whilst for the second half of the century we have Sweet's Ct 38, 39, 42 (= Ch 1200, 1195, 1510) together with Sweet's Ct 45 (Ch 1508) and the *Codex Aureus* (Rec 6.5), both associated with Surrey geographically, but linguistically to be aligned with Kt.¹ This distinction is important, for the former texts are a product of a Mercian scribal tradition, whereas the latter are not, see Brooks (1984: 155–74), Hogg (1988: 194–8). Finally there is a group of three tenth-century texts, the *Kentish Psalm*, the *Kentish Hymn*, and the glosses to *Proverbs*, which show a later development of Kt which is considerably influenced by WS. The three periods of texts may be described as early, middle, and late Kt.²

¹ The attempt by Ekwall (1923: 61–3) to show that the Surrey texts are in a Merc dialect is unconvincing, see Campbell (1959: §14n2) and also §§5.115, 119n1. Even Campbell's cautious statement (1959: §14) that the Surrey and Kt dialects were 'practically identical' may be unnecessary.

² Major works of reference to the Kt dialect are cited in Campbell (1959: 363)

1.10 Although the most widely attested dialect is West Saxon, which geographically covers the Thames Valley and areas to the south and west of that, centring upon Winchester, texts earlier than the end of the ninth century are rare in that dialect, exceptions being names and boundaries in Ch 264 (AD 778) and Ch 298 (AD 847). About 900 comes a group of texts associated with Alfred or his court: the translation of the *Cura Pastoralis*, the Parker ms. of the *Anglo-Saxon Chronicle* to 924, and the translation of Orosius. These texts share many features and are usually classified as 'Early West Saxon' (EWS), although a more helpful description might be Alfredian WS. Remarkably, such texts show a considerable degree of Merc influence, which is unlikely to be due merely to Merc scribal habits.¹ As shown by Gneuss (1972), there developed in the latter half of the tenth century a *Schriftsprache* which diverges considerably from EWS in all aspects of structure. This *Schriftsprache* seems to have been inspired by Æthelwold (and might therefore be called Æthelwoldian WS), but it is seen most clearly in the writings of Ælfric (c.1000). At this point the *Schriftsprache* becomes extended geographically and can be found to a

greater or lesser extent in writings not strictly WS, such as the *Homilies* of Wulfstan. Intermediate between EWS and LWS are a number of texts of which the most important are the *Leechbook* of Bald, the gloss on the *Junius Psalter*, the Abingdon mss. of the *Anglo-Saxon Chronicle*, and the West-Saxon Gospels.²

¹ The linguistic status of EWS remains controversial. My own views are expressed in Hogg (1988), cf. Stanley (1969), Lutz (1984).

² Major works of reference for EWS and LWS respectively are cited in Campbell (1959: 363–4; 364–6). Note additionally: Kim (1977) and Sprockel (1965). Also important is the introductory material in Bately's (1980) edition of *Orosius* and Pope's (1967–8) edition of *Ælfric*.

1.11 The above discussion generally excludes poetry. OE poetry is mostly to be found in collections dated *c.*1000: the Vercelli Book, the Exeter Book, the *Beowulf* ms., and the Junius (*Cædmon*) ms. They tend to be written in a form of language which combines West Saxon and Anglian elements to a degree not usual elsewhere, rather than adhering to the LWS norm which might be expected from their date and origin. It is true that there is variation from ms. to ms. – for example, in the Exeter Book LWS forms have a greater tendency to predominate – but their general agreement suggests that we are dealing with a common poetic dialect (most obviously in terms of vocabulary, but in fact affecting all aspects of linguistic structure).¹ The characteristics of this variety are not considered in this work except where individual forms are of more general relevance.

¹ For important comments on the poetic language see K. Sisam (1953: 138). Cameron et al. (1981) gives a detailed and valuable analysis of the *Beowulf* poem.

1.12 The limitations of OE dialectology expressed in §1.6 arise in many respects from the nature of the major texts discussed above and the development of scriptoria and scribal habits. A more precise understanding of dialectal variation in OE may be available from a close study of charters and place-names, see, for example, Brandl (1915), Ekwall (1917b), and the survey in Crowley (1986). Important ongoing work is being conducted by Kitson, see, for example, Kitson (1990). In the present circumstances, it must be emphasized both that dialect terms such as West Saxon are linguistic artefacts and that the dialect situation in Anglo-Saxon Britain was no doubt more complex and more variable than such terms appear to allow.¹

¹ The following are important reference works for material outside the scope of this book. In semantics and vocabulary the standard dictionary remains Bosworth and Toller (1898), supplemented by Toller (1921), Campbell (1972). Whilst we await full publication of the DOE, Healey and Venezky (1980) provides an invaluable concordance

of the material. A good general survey is Kastovsky (1992), whilst Schabram (1965), Gneuss (1972), and Wenisch (1979) are essential for the dialect evidence. In syntax the standard reference work is now Mitchell (1985). A good survey of OE syntax in the light of current linguistic theory is Traugott (1992). The standard reference work in palaeography is Ker (1957). Although dealing principally with OE literature, Greenfield and Robinson (1980) is a major bibliographical tool, see also Mitchell (1990a) for syntax, and the annual bibliographies in *Anglo-Saxon England*, the *Old English Newsletter*, and *The Year's Work in English Studies* provide full updates of information in all the relevant areas.

Orthography and phonology

2.1 Old English was written by contemporary scribes in a modified form of the Latin alphabet in the insular script, a development of the insular half-uncial brought to England by Irish missionaries. The latter script is found in a few early charters, the latest of which is Ch 264 of 778, cf. too LVD of the early ninth century. Three Latin charters contain English names in the uncial script, the latest being Ch 89 of 736. From the eleventh century a few letter-forms from the continental caroline miniscule are to be found. The insular forms of the letters ⟨e, f, g, r⟩, and ⟨s⟩ are quite distinct from the forms of the later carolingian script, and this has led, in the case of ⟨g⟩, to its replacement by ⟨ȝ⟩ (yogh) in some modern editions. For OE such usage is unnecessary, see Hogg (1992b). The letters ⟨þ⟩ (thorn) and ⟨ƿ⟩ (wynn) were borrowed from the Anglo-Saxon versions of the runic alphabet, see Hogg (1992b). The letter ⟨ð⟩ (eth)¹ is a native innovation.²

¹ Whilst *thorn* and *wynn* are the Anglo-Saxon runic names for these letters, *eth* appears to be a nineteenth-century coinage, see OEDS *edh*, the OE name for the letter being *ðæt*, see Robinson (1973: 450–1).

² For a full account of OE orthographical practices see the Introduction to Ker (1957), also Keller (1906).

2.2 The following letters were commonly employed by OE scribes: ⟨a, æ,¹ b, c, d, e, f, g, h, i, l, m, n, o, oe,² p, r, s, t, þ, ð, u, ƿ, y⟩. For the rarer letters ⟨q, k, x, z⟩ see §§2.45nl, 50, 51, 65nl. ⟨ƿ⟩ is normally written as ⟨w⟩ in order to avoid confusion with ⟨p, þ⟩, and this practice is adopted here also.

¹ For variant forms of ⟨æ⟩ and their possible values, see §2.12nl.

² ⟨oe⟩ is properly a digraph, but it is included here for convenience, see §2.17 for further details.

2.3 Abbreviations in OE mss. are few compared with Latin mss. of the same period, but the following are very common: ⟨ʀ⟩ = *and*, ⟨þ⟩ = *pæt*, ⟨†⟩ (that is, Lat. *vel*) = *oððe*. A stroke over the preceding letter is commonly used to signify: (1) final ⟨m⟩ after a vowel (*frā̄* = *fram*); (2) final ⟨ne⟩ after ⟨n⟩ (*þoñ̄* = *þonne*); (3) ⟨er⟩ after a consonant (*æf̄t* = *æfter*); (4) ⟨o⟩ after ⟨f⟩ (*f̄re* = *fore*).¹

¹ For other abbreviations, including use of runes and Latin abbreviations, see Campbell (1959: §§24–5).

2.4 Vowel length is not normally marked by OE scribes, but early mss. especially sometimes use double vowels to indicate long vowels, for example, EpGl 346, CorpGl 295 *liim* ‘cement’. Forms such as EpGl 71 *fraam* ‘bold’ where the vowel is short, cf. ErfGl, CorpGl *from*, may indicate stress (Pheifer 1974: §37n2), contrasting with unstressed *fram* ‘from’. Other examples are clearly illogical, such as Med 5.10 *seeċg* ‘sedge’.

2.5 The acute accent which is commonly found in many mss. is not normally to be taken as an indicator of vowel length. It is most frequently found on monosyllables, inflected or not, and can coincide with either length or stress, examples of the latter being *wég* ‘way’, *forwúrdon* ‘thrown away’. The accent is also common on monosyllabic prefixes, where its purpose is unclear; it may simply have been a clarificatory sign for the reader or some indication, especially in the case of pronouns and other normally unstressed forms, of sentence stress. In eleventh century texts a superscript curl and a circumflex begin to be used as indicators of short vowels, for example, *männ* ‘person’, *genâm* ‘taken’. In mss. where the superscript curl is restricted to short vowels in closed syllables, an extra-long macron could be used to indicate a short vowel in an open syllable, this macron extending over the following consonant and vowel, for example, *godēs* ‘god’ gen.sg. For fuller details see K. Sisam (1953: 186–8).

2.6 Of the letters in the OE alphabet, the following were normally used to represent vowels: ⟨a, æ, e, i, o, oe, u, y⟩.¹ In addition the following digraphs were regularly used: ⟨ea, eo, ie, io⟩.² There is considerable controversy over the interpretation of the digraphs, see the discussion in §§2.19–29.

¹ ⟨i⟩ and ⟨u⟩ were also used to represent approximants, see §§2.76–7.

² For other, rarer, graphic combinations used alongside these digraphs, see §§2.32–4.

2.7 Unfortunately there is no contemporary account of OE phonology such as exists for Icelandic,¹ and therefore in determining the sound system

of OE we must rely on other criteria, such as the later history of English, linguistic plausibility, etc. The only contemporary evidence we have is OE scribal practice. There is some evidence that OE spelling was often closely related to actual pronunciation in an intelligent manner, even when the standardized conventions of the Æthelwoldian *Schriftsprache* were in force, see §1.10.² Thus we find the deliberate adaptation or creation of graphs, such as ⟨æ, oe, y⟩, for purposes other than those in the Roman alphabet. Furthermore, OE scribes seem to have been usually quite careful in distinguishing minimal contrasts, as in the alternation of geminate and non-geminate consonants in medial position, such as *fremme* ‘I perform’ pr.ind., *freme* ‘perform’ imp.sg. Nevertheless, there are several cases where the OE spelling is an unreliable guide to pronunciation. Thus the letters ⟨c⟩ and ⟨g⟩ represent a wide variety of sounds from, on the one hand, a palatal approximant or high front non-syllabic vowel, as in *dæg* ‘day’, see §2.39, to a velar stop, as in *þinga* ‘thing’ gen.pl. There are also many examples of analogical spellings which need not have any phonological significance, such as *dæg*, see above, but Ch 1510 *dei*,³ and *fætt* ‘fat’ beside *fæt*, where a final geminate is unlikely, see §§7.80–1. Other examples are less clear, thus spellings in Or *hwales* ‘whale’ gen.sg., *-hwælum* dat.pl. appear to be due to orthographic confusion whose phonological significance is by no means certain. Finally, not all spelling distinctions should be assigned the same phonological status.⁴ Just as not all values represented by ⟨g⟩ are non-contrastive, so too it ought not to be assumed that different spellings necessarily signal a phonological contrast. Thus whilst ⟨a⟩ in *dagum* ‘day’ dat.pl. represents /a/, this does not imply that ⟨o⟩ in *mon* ‘man’ could not also represent the same phoneme, see §2.13. Similarly, that ⟨ēa⟩ : ⟨æ⟩ and ⟨ea⟩ : ⟨æ⟩ represent parallel phonological contrasts is not to be assumed from spelling alone.

¹ See Benediktsson (1972), Haugen (1950).

² See, for example, Bierbaumer (1988). For an alternative view see Stanley (1988).

³ *Dei* has *æ* > *e* by normal Kt raising, see §§5.189–91.

⁴ For discussion of this question see Hockett (1959), Stockwell and Barritt (1961).

2.8 It is, therefore, worth emphasizing that our knowledge of the sounds of a dead language cannot be precise. In the first instance we can only hope to present an outline of the sound-system of such languages. Therefore transcriptions below will normally be presented phonemically and phonetic transcriptions will only be given where they are both necessary and possible.¹ Furthermore, the choice of symbols for use in transcription is regularly dictated by common linguistic practice and it has no necessary implications for the pronunciation of OE. For example, except where there is pressing evidence to the contrary, vowels will normally be transcribed in terms of IPA standard conventions, but this should only be taken as a guide to

comprehension of the system of phonological contrasts existing in OE. A transcription such as /i:/ for ⟨ī⟩ does not therefore imply that OE speakers pronounced ⟨ī⟩ as cardinal vowel 1. In the case of vowels there may indeed have been a qualitative difference between long and short vowels, the former being slightly higher, the latter being more centralized.² It is, however, clear that the primary distinction was quantitative, and qualitative distinctions are therefore only mentioned (or transcribed) where historically important.

¹ The following conventions are used throughout. Slant brackets (/ /) enclose strictly phonemic transcriptions; square brackets ([]) enclose strictly phonetic transcriptions; angled brackets (⟨ ⟩) enclose orthographic sequences. Additionally italics are used both for cited forms and for broad phonetic transcriptions (most often used where questions of phonemic status are not at stake and for transcriptions of reconstructed Gmc and proto-OE forms). I appreciate that this could sometimes give rise to ambiguity, but there seems to be no other set of notations which would avoid the problem more satisfactorily.

² See Kuhn (1961: 524–5) and, for a contrary view, Campbell (1959: §31n2).

2.9 The three principal phonological contrasts found in the OE vowel system¹ are on three parameters: height; backness; rounding. It is most probable that there was a three-way height contrast, that is, high ~ mid ~ low.² There was also a two-way contrast for backness, that is, front ~ back. Rounding was the contrast most peripheral to the phonological system, operating contrastively only for nonlow front vowels, and even there the contrast had been lost for most dialects by the end of the period. There may also have been a distinction in rounding between low back vowels, but this was rarely, if ever, more than allophonic, see §2.13.

¹ §§2.9–18 discuss stressed vowels only; for unstressed vowels see §§2.42–4.

² It is sometimes claimed that in WMerc, after the operation of second fronting, there was a four-way height contrast amongst short front vowels, the product of second fronting being, allegedly, /ɛ/. For further discussion of this unresolved problem see §§5.87, 92.

2.10 ⟨i⟩ represents in all dialects a high front unrounded vowel, both short and long. The normal transcriptions for these sounds are /i, i:/. Examples of short and long vowels are *biden* ‘wait’ pa.subj.pl., *bīden* pr.subj.pl.

2.11 ⟨e⟩ represents in all dialects a mid front unrounded vowel, both short and long. The normal transcriptions for these sounds are /e, e:/, and it is certain that phonemically they did not contrast in height. However, it is quite possible that the short vowel was phonetically lower and/or more centralized than the long vowel. Examples of short and long ⟨e⟩ are: *metan* ‘measure’, *mētan* ‘meet’.

14 Orthography and phonology

2.12 ⟨æ⟩ represents in all dialects a low front unrounded vowel, both short and long.¹ The normal transcriptions for these sounds are /æ, æ:/. The use of these symbols should be viewed as a convenient mnemonic in the light of OE orthography, and developments in both OE and ME suggest that the long vowel was phonetically within the range [ɛ:] to [æ:] and the short vowel within the range [æ] to [a]. Examples of short and long ⟨æ⟩ are: *mæst* ‘mast’, *mǣst* ‘most’.

¹ In early mss. ⟨ae⟩ was used alongside ⟨æ⟩, without distinction, but by c.800 the ligatured form prevails. Also found is ⟨æ̅⟩, sometimes represented, especially in Sweet (1885), by ⟨e̅⟩. The distinctions are probably purely orthographic, see Williams (1905: §§102–5), and hence it is preferable to transcribe all three as ⟨æ⟩ unless paleographic considerations are of importance.

2.13 ⟨a⟩ normally represents in all dialects a low back unrounded vowel, both short and long. The preferred transcriptions for these sounds are /a, a:/, and transcriptions using /ɑ, ɑ:/, which would suggest a front vowel, should be avoided.^{1,2} Examples of short and long ⟨a⟩ are: *hara* ‘hare’, *hāra* ‘hoary’ wk. Before nasal consonants short ⟨a⟩ is alternatively written as ⟨o⟩, for example, *mann*, *monn* ‘man’. The choice of symbol is subject to variation according to date and dialect, see §§5.3–6. The variation in spelling suggests that *a* was rounded before a nasal, and it may also have been slightly raised.³ However, it probably remained an allophone of /ɑ/.⁴

¹ For a contrary view see Kuhn (1961: 524).

² Colman (1983a) argues that there was only one low short vowel phoneme in OE, that is, that [æ] and [a] were allophones of the same phoneme, whilst Ross (1951) argues that the phonemic contrast may have been restricted to WS, cf. Pilch (1970: §4.7). These conflicting claims indicate, at least, that any contrast which existed, and it may be safest to start off from the assumption that one did, was somewhat unstable. It is, of course, lost by ME.

³ Campbell (1959: §32) suggests that ⟨a⟩ normally represented an ‘open advanced back’ vowel, presumably [ä] or [ä:], while ⟨a⟩ before a nasal represented an ‘open full back’ vowel, presumably [ɑ]. It seems unlikely that *a* was so far centralized in forms such as *dagas* ‘days’ and very probable that the following nasal would cause slight raising, as it had done in Gmc, see Bülbring (1902: §30).

⁴ But some problems are caused by the status of the vowel in metathesized forms such as *orn* ‘ran’ pa.ind.sg., *born* ‘burn’ pa.ind.sg. Compare here Nbr *barn* ‘child’ and see further Hogg (1982b), cf. Kuhn (1961).

2.14 ⟨o⟩, except for those instances discussed in §2.13, represents a mid back rounded vowel, both short and long. The normal transcriptions for these sounds are /o, o:/, and it may be assumed that they corresponded exactly in height to the mid unrounded front vowels, see §2.11. Examples of short and long ⟨o⟩ are: *god* ‘god’, *gōd* ‘good’.¹

¹ Note here the frequent distinction in some mss., such as ÆHom(R), between *god* ‘God’ and *good* ‘good’.

2.15 ⟨u⟩ represents in all dialects a high back rounded vowel, both short and long. The normal transcriptions for these sounds are /u, u:/ . Examples of short and long ⟨u⟩ are: *dun* ‘dun’, *dūn* ‘hill’.

2.16 ⟨y⟩¹ represents in all dialects a high front rounded vowel, both short and long, contrasting in roundness with /i/ and in frontness with /u/. The normal transcriptions for these sounds are /y, y:/ . Examples of long and short ⟨y⟩ are: *syll* ‘sill’, *sȳll* ‘pillar’. In Kt *y* merges with *e* after about 900, see §§5.194–5, and in LWS *y* increasingly merges with *i* by a complex series of changes, see §§5.170ff.

¹ For some discussion of the origin of this graph, see Campbell (1959: §42 and n2).

2.17 ⟨oe⟩, properly a digraph,¹ represents in all dialects a mid front unrounded vowel, both short and long, contrasting in roundness with /e/ and in frontness with /o/. The preferred transcriptions for these sounds are /ø, ø:/ , since phonologically these vowels must have been equivalent in height to those represented by ⟨e, o⟩. Because of their similarity to the orthography, however, /œ, œ:/ are sometimes used. Examples of short and long ⟨oe⟩ are: Ps(A) *doehter* ‘daughter’, *ōēhteð* ‘persecute’ 3sg.pr.ind. In most dialects both short and long vowel are unrounded (> /e(:)/) during the period, the short vowel unrounding first. In WS unrounding takes place by the time of the earliest texts; in Kt during the ninth and tenth centuries; in Angl the long vowel at least persists until the end of the period.

¹ In some Kt charters (Ch 332, 1508, Rec 6.5) the digraph is reversed, hence Rec 6.5 (2×) *bēōc* ‘books’. Ch 332 2.2 *gedēō* ‘make’ 2pl.pr.subj., Ch 1508 (2×) *fēō* ‘take’ 3sg.pr.subj. have the vowel of 2/3sg.pr.ind. and need not be taken as disyllabic, see Brunner (1965: §27A). *gedēō* has the inflexion of the singular, but a plural subject. The reversal of the digraph is almost certainly restricted to Kt, so that Ps(A) 135.16 *wēōsten* ‘desert’ acc.sg. is probably to be taken as a further example of Kt scribal practice in this ms., to add to those given in Ball (1970).

2.18 Both /y(:)/ and /ø(:)/ were new phonemes in OE, introduced only after the operation of *i*-umlaut (§§5.74–7), and this may be the explanation of the usage in early mss., where ⟨y, oe, e⟩ are very often replaced by ⟨ui, oi, ei⟩ respectively. Naturally ⟨ui⟩ and ⟨oi⟩ can only represent sounds due to the umlaut of **u*, **o*, for example, Bede(M) *Ōidilualdo*, CorpGl 11 *buiris* ‘chisel’, MkGl(Li) 11.20 *drūiġe* ‘dry’. On the other hand, ⟨ei⟩ is used for three types: (a) the umlaut of **ea*, for example, BDS 1 *nēidfaerae* ‘necessary journey’; (b) where *ē* (= *ē*₁) is in an umlauting environment, for

example, CorpGl 728 *dēid* ‘deed’; (c) where \bar{e} (= \bar{e}_1) is not in an umlauting environment. The variety of ⟨ei⟩ spellings argues strongly against the suggestion of Campbell (1959: §42) that ⟨i⟩ indicated that *i*-umlaut began as a process by which /i/ was epenthesized after a vowel.¹ Much simpler is the explanation that ⟨ui⟩ was an early attempt to represent the new /y/ sound, in parallel to the runic letter η , and that ⟨oi⟩ was equally used to represent /ø/, see Brunner (1965: §94A). Eventually both digraphs were replaced by ⟨y⟩ and ⟨oe⟩ respectively, otherwise redundant graphs from the Roman alphabet.² ⟨ei⟩ spellings are less easily explained whatever hypothesis is accepted, but they are most probably due to orthographic analogy on ⟨ui, oi⟩, although cf. too CorpGl 967 *grēi* ‘grey’, see §2.39.

¹ That ⟨i⟩ must have been a diacritic is further confirmed by CorpGl *grūiit* ‘meal’ gen.sg., with doubling of ⟨i⟩ to show length of /y:/. Epenthetic /i/ could not possibly have been long.

² Note that in continental mss. ⟨ui⟩ is regularly used for ⟨y⟩ long after any epenthesized /i/ would have disappeared.

2.19 The interpretation of the digraphs ⟨ea, eo, io, ie⟩ has long been the subject of much controversy in OE studies, and this controversy needs to be outlined before we discuss the values represented by each digraph individually.¹

¹ A full bibliography to this controversy is given in Kuhn (1961), supplemented by Giffhorn (1974).

2.20 It is agreed that the digraphs ⟨ea, eo, io⟩ represent the following OE developments: (1) the development of the WGmc diphthongs **au, *eu, *iu* respectively; (2) the sounds resulting from the operation of breaking, see §§5.16ff., on the front vowels **ā, *ē, *ī*; (3) the sounds developed by the operation of the same change on the equivalent short vowels; (4) the sounds developed by the operation of back umlaut, see §§5.103ff., on the same short vowels; (5) the development (if any) of **ǣ* when preceded by an initial palatal consonant, that is, *č, ġ, sc*, see §§5.49–52; (6) the development (if any) of the back vowels *a, o, u* when preceded by a palatal consonant, see §§5.59ff. There is much less agreement, however, about the values which these digraphs represented in these cases.

2.21 It is also agreed that ⟨ie⟩, when it occurs,¹ represents the sounds developed by: (1) the influence (if any) of initial palatal consonants on **ē*; (2) the influence of *i*-umlaut on the sounds represented by the digraphs ⟨ea, eo, io⟩; (3) the contraction of originally bisyllabic *ī+e* sequences; (4) a small number of cases where the back umlaut of **i* does not result

in the digraph ⟨io⟩, see §5.104n8. Again, there is little agreement over the value of the sounds represented by this digraph.

¹ The digraph ⟨ie⟩ is virtually restricted to EWS. For further details see §§2.36–7.

2.22 The traditional view, as expressed by Bülbring (1902), Luick (1914–40), Campbell (1959), Brunner (1965), and a series of papers by Kuhn and Quirk (1953, 1955) is as follows.¹ It is certain that the Gmc diphthongs developed as diphthongs in OE, as in ON, OHG, see Prokosch (1939: §40a). It is therefore probable that if ⟨ea, eo, io⟩ were used to represent diphthongs from Gmc diphthongs, they would represent the same sounds in cases where Breaking exercised an effect on **ǣ*, **ē*, **ī*. Since it is inconceivable that the relevant sound changes would affect short and long vowels in quite different ways, the above diphthongs would contrast only in length with the sounds developed by the operation of breaking and back umlaut on short vowels. Hence there would have arisen a contrast between long and short diphthongs, which did not occur in Gmc.² Given that these digraphs normally represented diphthongs, it must be assumed that the exercise of palatal influence on **ǣ̃* resulted in the same diphthongs as represented elsewhere by ⟨ea⟩. However, where a back vowel followed the palatal consonant, as in *secan* ‘seek’, the alternative ⟨ea⟩ spellings, such as *secean*, did not represent diphthongs but showed only a diacritical use of ⟨e⟩ to indicate the palatal nature of the preceding consonant. The same holds for the use of ⟨e, i⟩ between a palatal consonant and ⟨o, u⟩, see §2.68 for examples.³ Thus the traditional position holds that ⟨ea, eo, io⟩ always represented diphthongs both long and short except where the orthographic evidence suggests otherwise or the linguistic development is implausible (as is true of *secean*). Similarly, ⟨ie⟩, since it is the result of *i*-umlaut of the sounds represented by ⟨ea, eo, io⟩, must also have represented a diphthong both long and short, since it is improbable that *i*-umlaut had a general monophthongizing effect.⁴ And if ⟨ie⟩ by *i*-umlaut represented a diphthong, then it is reasonable to assume that it also represented a diphthong in the other cases listed in §2.21.

¹ In conflating the opinions of these and other scholars certain minor differences between them are inevitably ignored.

² The Gmc diphthongs were, of course, phonologically equivalent to long vowels, but there was never any contrast in length between diphthongs.

³ An exception may have been in the development of back vowels after an initial palatal, see §2.31.

⁴ But note that in nWS the umlaut of *ēa* was *ē̃*, for example, *hēran* ‘hear’ as against EWS *hīeran*. On the other hand, EWS also has *hīran*, and LWS *hȳran*.

2.23 To the above theoretical arguments there may be added the following arguments from IOE and ME. Firstly, *ea*, when lengthened, develops as *ēa*.

The balance of probability, but no more, is that this makes it more likely that *ea* was a short partner of *ēa* rather than a monophthong. Secondly, *ěo* and *ēo* develop in parallel in eME, as /ø/ and /øi/, contrasting with the eME development of *ě* and *ē* as /ɛ/ and /ɛi/, see Luick (1914: §§357, 361, 378). Thirdly, it would appear that in S dialects of ME *ea* and *ēa* develop similarly and in contrast to *ǣ* and *ǣ̄*. Fourthly, in MKt *ēa* and *ēo* sometimes develop as rising diphthongs, that is, as [ja:], [jo:], and this points strongly to an original falling diphthong in each case, see Hallqvist (1948), Samuels (1952). Here Giffhorn (1974: 98ff.) gives considerable place-name evidence to show that such stress-shift phenomena are considerably more widespread yet.

2.24 Opponents of the traditional view all begin from the same assumption, namely that it is unlikely that OE had a four-way contrast between short and long vowels and short and long diphthongs. More particularly it is noted that it is almost (but not completely) unknown for languages to show a phonemic contrast between short and long diphthongs and that furthermore no such contrast exists in ModE nor is one hypothesized for Gmc. Therefore, it is argued, such a contrast should not be hypothesized for OE except under the most pressing circumstances, which do not exist. But the area of disagreement should not be exaggerated. Thus all opponents agree with the traditional view that ⟨e⟩ between a palatal consonant and an unstressed back vowel was purely diacritical, and they also all appear to accept, with the possible exception of Stockwell and Barritt (1951: §5.2), that ⟨ēa, ēo, īo⟩ represented ‘long’ diphthongs. The fundamental point at issue, therefore, is the status of the sounds represented by the ‘short’ digraphs ⟨ea, eo, io⟩ (and ⟨ie⟩). The attacks on the traditional position can be divided into four groups, discussed in §§2.25–8.

2.25 Daunt (1939, 1952) argues that the second element of the digraphs¹ was a diacritic indicating that the following consonant was phonemically [back]. A similar view is taken by Mossé (1945: §12). Hence *weorpan* ‘throw’ = /we pan/, *liomu* ‘limbs’ = /li mu/, etc. But this applies only to the ‘short’ digraphs, and Daunt accepts that the ‘long’ digraphs represented true diphthongs, even in otherwise identical environments. Further, Daunt (1952: 49) emphasizes that there was probably a glide between the front vowel and the following consonant, but claims that the resulting diphthong was no more than a conditioned allophone of the relevant monophthong. Daunt’s theory clearly fails to meet all but the second argument under §2.23, and even there her position is dubious. In any case she relies on the assumption that Old Irish scribes used vowel diacritics to indicate colouring of the following consonant and the further assumption that this scribal practice was taught to and preserved by the earliest OE scribes. Neither assumption can be fully substantiated, see especially Kuhn and Quirk (1953: 147–9).²

¹ For the use of the digraphs ⟨ea, ie⟩ after a palatal consonant, ignored here, see §2.31. The arguments concerning this usage, although highly relevant, are of a different order.

² It should be pointed that Daunt's analysis is essentially prosodic in the Firthian sense, and her analysis is valuable (at least) to the extent that it demonstrates the interdependence of the short diphthongs and the following consonant in a way which is extremely difficult for any purely segmental approach. Note here Stockwell and Barritt's initial proposal (1951: 13) that 'In the case of the back allophone of /æ/...the off-glide...was a part of the articulation of the following consonant', a proposal they later rejected in Stockwell and Barritt (1955: 376).

2.26 Stockwell and Barritt (1951, 1955, 1961) and Stockwell (1958) agree with Daunt in claiming that the second element of the digraphs was diacritical, but differ in asserting that its purpose was to indicate a 'back' (= centralized and possibly lowered) allophone of the relevant monophthong. Thus it is claimed that if ⟨æ⟩ represents [æ], then ⟨ea⟩ represents [æ̠],¹ both of which are allophones of the same phoneme /æ/. Stockwell and Barritt's arguments are primarily theoretical, since their starting-point is the alleged impossibility of the four-way contrast mentioned in §2.24. Their theory meets the objections of §2.23 no more adequately than does Daunt's, and there is one further objection to be made. This is that, if [æ] and [æ̠] are allophones of the same phoneme, there should be no minimal pairs contrasting the two. But there are numerous such pairs, such as *ærn* 'house' as against *earn* 'eagle', *stæ'l* 'place' as against *steal* 'stall'. For further criticisms see Kuhn and Quirk (1953, 1955), Hockett (1959).

¹ [æ̠] is a retranscription of [æ], which Stockwell and Barritt take from Trager & Smith (1951).

2.27 Hockett (1959), followed by Antonsen (1972), argues, at least for WMerc as represented by Ps(A), that the digraphs represented phonemes distinct from those represented by the corresponding single graphs, thus agreeing with the traditional position against Stockwell and Barritt. But, he argues, these phonemes were central vowels rather than diphthongs. Hence ⟨io⟩ = /i/, ⟨eo⟩ = /ə/, ⟨ea⟩ = /e/ and similarly for the long members of each pair. As long as the analysis is restricted to the Angl dialects the arguments of §2.23 are met, but this cannot be so for the S dialects, and even for Angl the cases of stress-shift cited by Giffhorn (1974) raise major doubts.

¹ Hockett transcribes ⟨ea⟩ as /a/ but states that it is a low back spread (unrounded) vowel. In that case /a/ is a misleading transcription. Furthermore, the vowel (if it existed) must have been central rather than back, and it is interpreted as such here (as are /i/ and /ə/).

2.28 Lass and Anderson (1975) accept the traditional view that ⟨ea, eo, io⟩ represented diphthongs, but suggest that there was no phonological

contrast of length between OE diphthongs. Their claim is dependent upon the acceptance of generative phonological theory, which permits reversal of completed mergers and as such is probably unacceptable, see Weinreich, Labov and Herzog (1968: 147–8), also Lass (1983: 174–5). Another argument against this proposal concerns the relative ordering of sound changes. Lass and Anderson order back umlaut before *i*-umlaut, and hence before apocope of final *-i*, *-u* after a long syllable (see §§6.13ff.), by which, for example, **dēoru* > *dēor* ‘animals’. But diphthongs due to back umlaut do not cause such loss, for example, *liomu* ‘limbs’. Thus Lass and Anderson’s position is internally contradictory.

2.29 The evidence from both OE and ME suggests very strongly that the traditional position is in essence correct, although the position of Daunt (1939), if correctly interpreted as a prosodic analysis, has much to commend it, see too the proposal of Stockwell and Barritt (1951) quoted in §2.25n2. Therefore we accept here that OE had a phonemic contrast between long and short diphthongs. Nevertheless, it has to be acknowledged that the least satisfactory aspect of the traditional position concerns the long ~ short contrast. Since the so-called long diphthongs in large part derived without significant alteration from Gmc diphthongs, it is implausible to suggest that their length was in any crucial respect altered. They must therefore have remained equivalent in length to long vowels, as in Gmc, see §2.22 and n2, that is to say, they must have been bimoric. If that is so, then the so-called short diphthongs, which are derived from short vowels in Gmc, must have been monomoric. Thus long and short diphthongs would have the same configuration V_1V_2 , but in the former cases that configuration would be dominated by two morae, in the latter cases by only one mora, see Lass (1983: 172–7; 1984: 253–7). The normal phonological case, of course, is exemplified by the long diphthongs, whereas the short diphthongs are somewhat unusual. It seems preferable to recognize this situation by transcription conventions, and therefore in the remainder of this work in both phonemic and phonetic transcriptions long diphthongs will be represented without indication of length, for example, /*eo*/, whilst short diphthongs will be indicated by a breve over both elements, for example, /*ēō*/.

It is recognized, however, that this conflicts with the traditional conventions, by which long diphthongs are marked, and the traditional conventions are therefore, and for the sake of clarity only, respected in graphemic or italicized representations, hence ⟨*ēo*⟩, *ēo* are equivalents of /*eo*/, and ⟨*eo*⟩, *eo* equivalents of /*ēō*/.

Some further clarification of the traditional position is necessary in three respects: (1) the status of the second elements of diphthongs in all contexts except after a palatal consonant; (2) the values represented by the digraphs when preceded by a palatal consonant; (3) the values represented by ⟨*ie*⟩. (1) and (2) are discussed in §§2.30, 31, (3) in §2.36.

2.30 Early spellings, such as ⟨iu, eu, æu⟩, see §§2.32–4, imply that originally the second element of all diphthongs was a high back rounded vowel, but this element, possibly to be transcribed as nonsyllabic [u], was soon to be lowered to a mid or low vowel, according to the height of the syllabic element. It seems most probable that there was eventually a reduction of the second element to an unstressed centralized schwa vowel [ə], but this process must have varied from dialect to dialect, possibly being earliest in Angl and least common in Kt. Equally probable, perhaps, is that full and reduced forms were in almost free variation, subject to such influences as speech tempo. The precise value of these elements seems, therefore, impossible to determine.

2.31 When \tilde{e} or $\tilde{æ}$ were preceded by a palatal consonant, they developed in WS as $\tilde{i}e$, $\tilde{e}a$ respectively. The phonetic conditions for this shift are quite different from those for breaking, see §5.49 for discussion. When a palatal consonant was followed by a back vowel, any diphthong which developed is likely to have been rising, see §§5.59–70. In both types the question of the reality of the supposed sound change is difficult and perhaps even insoluble. For discussion of the status of the digraphs and what values they might have represented in these contexts see the sections cited immediately above for some tentative conclusions.

2.32 Except where ⟨i⟩ is a diacritic, ⟨io⟩ represented a diphthong both short and long, with prominence on the first element. The normal transcription for these sounds would be /iö, io/, although /ið, iə/ may be preferable, see §2.30. However, both diphthongs are subject to considerable change during the OE period, see §§5.155ff., and neither consistently remains in its original form after the ninth century. In all dialects except Nbr the diphthongs fall together with those represented by ⟨ēo⟩, see §2.33. In early texts ⟨iu⟩ spellings occur in a minority of cases, which suggests an earlier pronunciation of /iũ, iu/. Examples of $\tilde{i}u$ from Gmc **iu* are: CorpGl *gēpīudde* ‘join’ pa.ind.sg., CorpGl *hīustra* ‘darkness’ acc.pl., LRid *flīusum* ‘fleece’ dat.pl. The only examples of \tilde{u} are due to breaking and are: LVD † *Iurminburg*, KSB12 † *Iurmenrič(ing)*.¹

¹ In BDS 1 *uiurthit* ‘become’ 3sg.pr.ind. ⟨iu⟩ most probably represents /y/, being an inverted form of ⟨ui⟩, see §2.18, presumably to avoid **⟨uuui-⟩. /y/ is due to rounding of /i/ rather than *i*-umlaut, see §5.31n2.

2.33 Except where ⟨e⟩ is a diacritic ⟨eo⟩ represented a diphthong both short and long, distinguished from ⟨īo⟩ only by the height of the first element. The normal transcriptions for these sounds are /eö, eo/, see §§2.30, 32. Examples of short and long ⟨eo⟩ are: *cneowe* ‘knee’ dat.sg, *cnēowe*

‘know’ pa.subj.sg.¹ For the later history of $\check{e}o$ and its merger with $\check{i}o$ see §§5.155–62. As with $\check{i}o$, there are a few early spellings with ⟨u⟩ as second element, suggesting an earlier pronunciation / $\check{e}u$, $e\check{u}$ /. Examples of $\check{e}u$ from Gmc **eu* are: EpGl 940 *stēupfæder* ‘stepfather’, EpGl, ErfGl 726 *trēulesnis* ‘faithlessness’. Short diphthongs due to breaking or back umlaut rarely have ⟨-u⟩: CollGl 12.6 *eutende* ‘eat’ pres.part.,² Bede(M)† *Ēumer* (< **Euhmer*), LVD† *Friuhwulf* (< **Frihu-*).

¹ *Cnēowe* has the vowel of the ind.

² *Eutende* has the vowel of the inf. **eutān*, see Li, Ru2 *eatta*.

2.34 Except where ⟨e⟩ is a diacritic, ⟨ea⟩ represented a diphthong both short and long, distinguished from $\check{i}o$, $\check{e}o$ by both the height of the first element and the height and probable unrounding of the second element (where this is not a reduced vowel). The first element is probably equivalent to the sound represented by ⟨æ⟩ elsewhere, see below for confirming spellings. The normal transcriptions for these sounds are / $\check{e}a$, $\check{æ}a$ /, since the second element was certainly back when not reduced. On the other hand, some early spellings, see below, and the ME development of at least the long diphthong to / $\check{e}i$ /, see Jordan (1974: §81),¹ make it possible that a more accurate phonetic transcription might be [$\check{e}a$]. Examples of short and long ⟨ea⟩ are: *seah* ‘see’ pa.ind.sg., *nēah* ‘near’. As with $\check{i}o$, $\check{e}o$ early mss. have occasional spellings confirming the development from / $\check{æ}u$ /, but they also often suggest a slightly higher first element, as discussed immediately above. The most common of these early variants is ⟨eo⟩, examples of $\check{e}o$ from Gmc **au* being: CorpGl 1402 *gefērōs* ‘freeze’ pa.ind.sg., CorpGl 187 *ēorscripel* ‘earscraper’; an example of $\check{e}o$ due to breaking is: CorpGl 545 *seorwum* ‘device’ dat.pl.² An older spelling is ⟨ $\check{æ}o$ ⟩, examples from Gmc **au* being: Bede(M)† *ĀĒodboldum*, *ĀĒdbaldo*, CorpGl 1117 *genāot* ‘companion’, LVD† *ĀĒostoruini* (alongside *Ēosturuini*). The spelling ⟨ $\check{æ}u$ ⟩ is seen in Rune48 *bæurnæ* ‘son’ dat.sg.³ Occasional ⟨ $\check{æ}a$ ⟩ spellings can be observed throughout the period, but they are without phonological significance except in so far as they confirm the pronunciation of the first element.

¹ Jordan (1974: §58) suggests that even in the case of the short diphthong the first element might have been slightly raised in S dialects at least, see Hallqvist (1948: 9–46). On the other hand, it may be that we are dealing with a qualitative difference between short and long $\check{æ}$, see §2.12.

² Ps(A) *feodrum* ‘father’ dat.pl. and similar forms in the same ms. should not be taken here, see §5.45 and n1.

³ In *bæurnæ* breaking is found despite the Nbr provenance. It is possible that the word is a form of *beorn* ‘prince’, see Page (1973: 145), in which case it should be taken under §5.44n1.

2.35 The remarks of §2.34 probably apply also to instances of ⟨ēa⟩ due to the influence of palatal consonants on * \check{e} . Even if the phonetics of that change were different from that of, say, breaking, see §5.49, by the time of the written texts it would seem likely that ⟨ea⟩ here represented sounds which may be transcribed as something like [ẽa, ea, and these sounds must have been no more than allophones of the phonemes described in §2.34. Indeed, given the comments there it is possible that they became phonetically identical. Examples of short and long ⟨ea⟩ after palatal consonants are: *gēare* ‘entirely’, *gēare* ‘year’ dat.sg.

2.36 Disagreement about the values represented by the digraph ⟨ie⟩ in part runs parallel to the disagreement over the values represented by the other digraphs. Therefore the arguments presented in §§2.22–9 would, other things being equal, hold also for ⟨ie⟩. Thus we may accept that originally, but see §2.37, this digraph represented a diphthong both short and long. However, there is further disagreement over the precise values of the diphthongs. The oldest view, expressed by Bülbring (1902: §46), Brunner (1965: §41), Campbell (1959: §39), interprets the digraph directly as /iē, ie/.¹ In favour of this view is the contraction of disyllabic /ie/, for example, *sīe* ‘be’ pr.subj.sg., and possibly the development of * \check{e} > *iē* after palatal consonants. Against this view is the early monophthongization of *iē* > *ī*, *ȳ*, see §2.37. Another view, found in Luick (1914–40: §191), is that the digraph represented /iǝ, iə/ with some rounding of the second element. This view has much to recommend it. Lass and Anderson (1975: 122–7) have suggested that ⟨ie⟩ represented /iū, iu/.² The view is reasonable, but it is doubtful that the second element could have been [u], which in WS is regularly lowered to /o/, see too §2.40. Colman (1985) argues that ⟨ie⟩ which is the product of *i*-umlaut represents /iȳ, iy/.^{3,4} This view, which must be construed as phonemic rather than phonetic, appears to be most consistent with the chronological and dialectal spread of *ie*, see §2.37, although difficulties with the other sources of ⟨ie⟩ spellings remain, see n4. Examples of short and long ⟨ie⟩ are *nīeht* ‘night’, *nīehst* ‘next’.

¹ Brunner takes the ⟨i⟩ of ⟨ie⟩ after an initial palatal consonant as purely diacritical.

² But without phonological contrast of length, see §2.28.

³ The same conclusion was earlier drawn by McLaughlin (1979), but his arguments are rejected by Colman.

⁴ Colman holds essentially the same position as Brunner, see n1, with regard to ⟨ie⟩ after a palatal consonant, and rejects the view that bisyllabic /ie/ ever became diphthongal. But since she admits (1985: 10–11) the possibility that /iȳ, iy/ became at some fairly early stage [iǝ, iə], these cases could fall in with the above. The use of ⟨ie⟩ to indicate breaking or back mutation is only an inverted spelling for ⟨i⟩, *contra*, for example, Campbell (1959: §299), see §§2.37, 5.24n6, 5.104n8.

2.37 The spread of ⟨ie⟩ is extremely restricted, it being used as a digraph only in EWS. Even there it is clear that ⟨ie⟩ no longer represented a diphthong,

even if it did so originally, as suggested in §2.36, see, however, §§5.164, 171. The evidence of the early texts is that by this time the original sounds had monophthongized, in most environments merging with /i(:)/, less commonly with /y(:)/, for full details see §§5.163ff. The main justification for this claim is that not only do words with earlier *īe* become spelled with ⟨i⟩, but also words with original *ī* become, by confusion, spelled with ⟨ie⟩, for example, *hiene* alongside *hine* ‘him’. In LWS there are no ⟨ie⟩ spellings but the development there is different for except in a palatal environment *īe* normally merges with *ȳ*. Hence early *hieran* ‘hear’ gives EWS *hīran*, LWS *hȳran*. For further discussion of these complex matters see again §§5.163ff. Thus not only has the original diphthong disappeared by the end of the ninth century, the time of the EWS texts, but in all dialects except EWS ⟨ie⟩ regularly occurs only as a representation of a disyllabic sequence.¹

¹ This is true of Ps(A) *onsien* ‘face’, *fienda, -um* ‘enemy’, see Campbell (1959: §201.3n2 and refs).

2.38 It is possible that a further series of diphthongs arose during the OE period when final /j, w/ vocalized to [i, u], see §§7.69ff. It is impossible to determine the length of the resultant diphthongs from the texts, although theoretically it would be expected that they would be quantitatively equivalent to the original long diphthongs. However, the ME developments are significant in that where short and long monophthongs develop differently, as in *S a > a*, *ā > ō*, the first elements of these putative diphthongs develop, at least in the first instance, according to whether they are from originally short or long monophthongs, thus OE *dæg* > *dai*, *græg* > *grei*, see Luick (1914–40: §§372–3). Therefore we have the choice of claiming that diphthongization has taken place, in which event there is the theoretically improbable consequence that both short and long diphthongs arise, for example, /æi, æi/, or claiming that diphthongization did not take place, following Colman (1983b), who adduces further evidence to support this analysis.¹ We accept, with Colman, however, that in the case of *iġ* sequences the development would be directly to *ī* (with shortening to *i* in unstressed syllables).

¹ Colman’s arguments are supported by two ME developments. Firstly, when the diphthongs *ei* and *ai* do appear, then their subsequent history is different from that of monophthongal /e, a/, since they merge together, see PDE *way* (< OE *weg*), *day*, once diphthongization takes place contrastive length is lost, as can be seen by Orm’s failure to distinguish length in these cases, see Luick (1914–40: §§372A2, 373A1). Jordan’s suggestion (1974: §87R1) that *da33* represented [dai·] cannot be accepted.

2.39 In the case of /j/ the processes discussed in §2.38 could, of course, only take place after front vowels, and in all cases the normal spelling representation of the sequences is ⟨iġ, eġ, æġ⟩. Typical examples are: *twiġ*¹

‘twig’, *wīġ* ‘war’, *weg* ‘way’, *wrēġ* ‘accuse’ imp., *dæg* ‘day’, *græġ* ‘grey’. In both the early glossaries and Kt ⟨-i⟩ spellings are common, and ⟨i⟩ for ⟨iġ⟩ is quite widespread, hence Mk(WSCp) 13.28 *twī*, AldV 3.1.72 *wī(bora)* ‘standard-bearer’, OccGl 49.8.49 *wei*, 30.14 *wrēi*, Ch 1510 (5×) *dei*,² CorpGl 967 *grēi*.³ In LWS and lNbr especially the compromise spellings ⟨-ēiġ, -æiġ⟩ are found, but note CorpGl 2093 *seign* ‘sign’, 850 *grēiġ*.

¹ It follows from the remarks in §2.38 that the result of vocalization of *iġ* is *ī*, not *ī̄*.

² With Kt *e* for *æ*.

³ With Angl *ē* for *æ*₁.

2.40 In the case of /w/ the same processes arise, except that the /w/ is analogically restored, see §7.72, and that it is always preceded by a long vowel or diphthong. Here too the early glossaries and Kt show ⟨-u⟩ spellings, for example, ErfGl 610 *mēu* for *mæw* ‘gull’, CorpGl 2 *stōu* for *stōw* ‘place’.

2.41 From the above discussion it might seem possible to postulate an overall vowel and diphthong system for OE, but this would be to ignore many differences which occur both dialectally and diatopically. For an attempt to describe the changing relationships between dialects and over time see Kuhn (1961). The following diagrams attempt only to present the major phonological contrasts potentially present in OE; they do not claim to represent in any way the actual state of affairs in any dialect at any time.

(a) Long and short vowels

i(:)	y(:)	u(:)
e(:)	ø(:)	o(:)
æ(:)		ɑ(:)

(b) Long and short diphthongs

iy iŷ
eo eō
æa æǣ

2.42 The above remarks apply only to the vowels and diphthongs of fully stressed syllables. In unstressed syllables and probably also in secondary-stressed syllables the position is rather different.¹ It is therefore preferable to distinguish the phonemic system operating in unstressed syllables from that operating in primary-stressed syllables.

¹ For details of the stress system see §§2.84–91.

2.43 In unstressed syllables only short vowels occur, even in the earliest period, and these vowels are represented by ⟨i, e, æ, a, o, u⟩. Except for

⟨o⟩ and ⟨u⟩ these graphs may be taken to represent the same values as in stressed syllables. In the earliest Nbr texts ⟨u⟩ predominates over ⟨o⟩, but in the Merc glossaries both ⟨u⟩ and ⟨o⟩ can be found. In later texts ⟨o⟩ is increasingly predominant in the S, but ⟨u⟩ persists in Nbr especially. This suggests that lowering of Gmc **u* to /*o*/ was in origin a S change, which did not spread completely to Angl texts, where the sound often remains as /*u*/, see §6.56.¹ In Kt and LWS /*a*/ and /*o*/ have certainly fallen together in a phoneme whose precise values cannot be determined, perhaps something like /*ɔ*/. Although in the written language the front unstressed vowels may have been distinguished at the beginning of the period with some degree of accuracy, especially in Merc, but see §§6.49, 51, there must have been a very early merger, not later than the eighth century, perhaps as /*ɛ*/.² However, unstressed *i* remains in certain environments, notably when protected by a following palatal consonant, for example, *meahtig* ‘mighty’, see further §§6.50–1. By the eleventh century the front and back vowels were becoming thoroughly confused, which suggests a reduction in the unstressed vowel system to simply /*ɔ*/, and although this is not seen in the best LWS texts, the process of reduction may already have been at work in EWS, see Bately (1980: xlv).

¹ It should be noted that there were never three unstressed back vowel phonemes. Rather, whatever the dialect or date, there was at most a contrast between, on the one hand, /*a*/, and, on the other hand, /*u*/ or /*o*/ (not both).

² Kuhn (1961) transcribes [ɛ] and [ɔ] as [ə] and [i] respectively. In the present state of our knowledge the question is largely one of taste.

2.44 Syllables with secondary stress show a compromise between the behaviour of fully stressed and unstressed vowels. Long vowels are regularly reduced to short vowels and diphthongs are both lowered to *ea* (< *io*, *eo*) and reduced to *a*. Examples of the reduction of diphthongs are: *sciptearo*, *sciptaran* ‘pitch’ alongside *teoru* ‘tar’. Both original short vowels and short vowels due to the above processes of reduction can then be further reduced to the unstressed variants discussed in §2.43. It follows from the above that long vowels are not found in syllables which are not primary-stressed.¹ Therefore in this work originally long vowels in secondary- or weak-stressed syllables will not be marked for length.

¹ The situation is much more complex than suggested here. It might be more accurate to state that syllables which originally had secondary stress regularly become weak-stressed during the OE period, thus accounting for the processes described above, see §§2.83ff. Such reduction would have depended upon a number of factors, including speech tempo and other rarely recoverable variables, as well as date of the text. I would not therefore wish to suggest that a line such as Beo 1523a *pæt se beado-lēoma* did not have a long diphthong in *lēoma*. On the other hand, by §2.43 *se* could not possibly have ever had a long vowel (except if subject to emphatic stress).

2.45 Of the letters in the OE alphabet, the following were normally used to represent consonants: ⟨b, c, d, f, g, h, k, l, m, n, p, r, s, t, þ, ð, w⟩, where ⟨w⟩ = ⟨ƿ⟩, see §2.2. In addition ⟨i⟩ was sometimes used to represent a consonantal value alongside its more usual representation of a vowel, and ⟨u⟩ and ⟨uu⟩ are replacements for ⟨w⟩, especially in Nbr. ⟨x⟩ and ⟨z⟩ occur only rarely, see §§2.51, 2.65n1 for discussion of their values. Two digraphs are in common use: ⟨sc⟩, which represents an earlier sequence of two segments, and can still be so used, as in *ascian* ‘ask’; ⟨cg⟩, which is mostly used to represent earlier or existing geminate consonants, see §§2.61, 67. Other digraphs are rare, except in the earliest texts, and the most frequent of these are ⟨ch, th⟩ see §§2.60n1, 59 for examples.¹ Lengthening of consonants is indicated by doubling, for example, ⟨dd⟩.

¹ Some early texts have ⟨qu⟩ for initial /kw/, for example, EpGl 661 *quiða* ‘womb’.

2.46 OE had the following principal classes of consonants: stops, fricatives, sibilants, affricates, nasals, liquids, approximants.¹ The feature of [voice] was phonologically contrastive for stops and affricates, whilst [length] was contrastive for all classes except approximants, but not necessarily contrastive for all members of each class. At one stage long consonants must have occurred both medially and finally, but by the period of the written texts they only occurred intervocalically over syllable boundaries. They are therefore analysed here as geminates, see §2.78(1) for further discussion of their status and distribution. OE had four contrasting points of articulation: labial, dental, palatal, and alveolar, but it should be noted that labial includes both bilabial and labiodental articulations, see §2.54 for some minor reservations on this noncontrastiveness. Dental could be replaced with equal accuracy by the term alveolar, since there is no satisfactory evidence which might enable us to determine the place of articulation more closely. Of these contrasts, the most peripheral is palatal articulation, which is most usually an allophonic variation of velar articulation. There was also a glottal fricative [h], see §2.60, but there is no direct evidence for a corresponding glottal stop.²

¹ Strictly speaking, sibilants form a subclass of fricatives and liquids a subclass of approximants, see Ladefoged (1982: 261–2; 61–2). Their separation here is largely a matter of convenience, but at least in the liquids and approximants important phonological differences exist between the two subclasses.

² It is sometimes claimed that the alliteration of vowels in OE poetry must be due to the presence of an initial glottal stop. Although the question of the existence of such a stop is not ultimately decidable, it must be said that the basis for postulating such could scarcely be firmer, and the evidence of prominence shift shown in later place-names such as *Yalding* argues against it.

2.47 The OE voiceless stops show a three-way contrast in point of articulation, with no contrastive palatal stop, although there could have been a

period before that of the earliest texts when there was a separate palatal stop phoneme, see §2.65. All voiceless stops show a phonological contrast of length.

2.48 The voiceless labial stop was represented by ⟨p⟩,¹ and since it must have been bilabial it is transcribed as /p/. PIE */b/, which develops as Gmc */p/ by Grimm's Law, was extremely rare in initial position and far from common elsewhere, so /p/ is relatively uncommon in OE also, especially initially, where it is most commonly found in loan-words, see Kluge (1891: §10.2).² Examples of /p/ initially, intervocalically and finally³ are: *pōl* 'pool', *griþan* 'grip', *scīp* 'ship'. Intervocalically geminate forms are found, examples of /pp/ being: *hoppian* 'hop', *steppe* 'step' pr.subj.sg., against *hopian* 'hope', *stepe* 'step' (n.).

¹ For other, rare, uses of ⟨p⟩, see §2.58n1.

² The loans, of course, may be very early, of CGmc origin. Many other forms with initial /p/ are of uncertain origin, see Holthausen (1934: pæþ), Onions (1966: path). Note also the rune name *peorþ*, see Page (1973: 79–80).

³ Similar examples will be given for each consonantal phoneme except where otherwise stated. For a fuller exemplification of the distribution of OE phonemes see Moulton (1954: 21–9) and, especially for Merc but essential for OE generally, Kuhn (1970).

2.49 The voiceless dental stop was represented by ⟨t⟩,¹ and this is normally transcribed as /t/. Examples of /t/ are: *tōþ* 'tooth', *metan* 'measure', *geat* 'gate'. Examples of /tt/ are: *hätte* 'is called', *sette* 'set' 1sg.pr.ind., against *hâte* 'hotly', *sete* 'set!'.

¹ For other, extremely rare, uses of ⟨t⟩, see §2.59n1.

2.50 The voiceless velar stop was represented by both ⟨c⟩ and ⟨k⟩. The former graph, although by far the more frequent, is ambiguous, representing both the voiceless velar stop and a voiceless affricate, see §2.65. Despite the fact that ⟨k⟩ would be unambiguous, it is much less frequently used, and is only very commonly found before *y*, for example, *kyning* 'king' alongside *cyning*. In Rul ⟨k⟩ predominates over ⟨c⟩ when a front vowel follows, see Bülbring (1899b), Kuhn (1970: 25), which might represent an attempt at disambiguating the symbols, although ⟨k⟩ is often used when ⟨c⟩ would be equally unambiguous, for example, *knēorisse* 'generation', *krist* 'Christ'.¹ Since the primary allophone of this consonant was undoubtedly velar rather than palatal, the usual transcription is /k/. Examples of /k/ are: *cuman* 'come', *lōcian* 'look', *bōc* 'book'. Examples of /kk/ are: *brocces* 'badger' gen.sg., *locca* 'lock, curl' gen.pl. against *brōces* 'affliction' gen.sg., *loca* 'lock'. The only possible orthographic evidence which might suggest that there was a palatal allophone of /k/, that is, [c], before front vowels

comes from the Ruthwell Cross, where the symbol ✖ is used for /k/ before a front vowel in contrast to þ which is used elsewhere. Thus we find RuthCr *kyning* ‘king’, *unket* ‘us two’ against *krist*, *kwōmu* ‘they came’, see Page (1973: 152), Campbell (1959: §427n1). But Ball (1988: 115–16) argues convincingly that the two runes are merely allographs of the same grapheme, without phonological significance, against, for example, King (1986: 60–1). Thus textual evidence for a palatal allophone of /k/ is at best doubtful.

¹ It is possible that the choice of ⟨c⟩ or ⟨k⟩ in Rul is on a lexeme-by-lexeme basis, hence given *cuman* ‘come’ we also find *cymende* ‘coming’. This would reduce the efficiency of any putative distinction.

2.51 When the cluster /ks/ occurs, this is normally represented by ⟨x⟩, for example, *feax* ‘hair’, *fox* ‘fox’. Rarer spellings of the same cluster are: ⟨cs, cx, hs, hx, xs⟩, examples being: *æcs*, *ricxian*, *weahsan*, *wihxð*, *æxs* for more usual *æx*, etc., see Cosijn (1888a: §§131, 137, 144). Those spellings with ⟨h⟩ presumably reflect an early stage of OE when the sound change of /xs/ > /ks/, see §§7.4–9, had not yet taken place or was not yet sufficiently advanced to be recognized orthographically.

2.52 The OE voiced stops, although they parallel the voiceless stops in having a three-way contrast in point of articulation and no palatal stop, are considerably more restricted in distribution than their voiceless counterparts, only the dental voiced stop having the full range of distribution. The voiced labial stop contrasts with the labial fricative only initially, and it is doubtful whether the voiced velar stop and the voiced velar fricative ever contrasted phonemically in OE, see §§2.53–5, 78(3), for further details. Length, however, is contrastive for all three stops, and in the case of the labial and velar stops that determines the alternation between fricative and stop.

2.53 The voiced labial stop was represented by ⟨b⟩. This stop contrasted with /p/ only in voice, and is hence transcribed as /b/. The stop developed from Gmc */b ~ β/, and stop articulation occurred only initially, after nasals and in gemination.¹ Examples of /b/ are: *bindan* ‘bind’, *climban* ‘climb’, *lamb* ‘lamb’, *sib(b)* ‘relationship’. Examples of /bb/ are *habban* ‘have’, *swebban* ‘kill’. Initially /b/ contrasted with /f/, as in *bindan* against *findan* ‘find’, and after degemination of final consonants the same contrast can be found finally, for example, *web(b)* ‘web’ against *wef* ‘weave!’. Medially geminate /bb/ contrasts with the marginal geminate /ff/, see §2.58, but there is also a regular alternation between /bb/ and non-geminate /f/ (= [v]), for example, Ps(A) *habbað* ‘they have’ against *hafað* ‘he has’.

¹ Exceptionally /b/ appears to occur medially in the pet-name † *Saba*, cited and discussed in Clark (1992).

2.54 In the Merc glossaries especially, ⟨b⟩ is also used to represent Gmc * $[\beta]$, which was in the process of merging with $[v]$, see §7.55. The use of ⟨b⟩ is most consistent in EpGl, closely followed by ErfGl, and is less regular in CorpGl.¹ Examples are: EpGl, ErfGl 468, CorpGl 951 *scēabas*, *scēbas*, *scēabas* ‘sheaves’, EpGl, ErfGl 635 *salb* ‘ointment’ against CorpGl 1272 *salf*.² In eNbr texts ⟨b⟩ is normally replaced by ⟨f⟩, but note CædH(M) 6 *heben* ‘heaven’ alongside 1 *hefaen-*, CædH(L) *hefen*, LRid *ob* ‘from’ (2×). Similar examples in Bede(M) are: † *Ælbfled*, † *Ġebmund*, † *Ġebrin*, † *Suæhardo*, † *Cnōbheri*. The slightly later LVD has ⟨b⟩ rarely, for example, † *Cnobualch*. Otherwise ⟨b⟩ for Gmc * $[\beta]$ is extremely rare, examples being CP(C) 180.6 *frēbranne* ‘comfort’, CP(H) *wēobud* ‘altar’ (4×, also CP(C)), *næbre* ‘never’ (5×).³ An exception to this is found in the mid ninth-century Kt charters, where ⟨b⟩ is common alongside ⟨f⟩, for example, Ch 1200.3 *hlābard* ‘lord’, 8 *ġib* ‘if’, Ch 1195.2 *ob* ‘from’, 3 *aġiaban* ‘give’, 4 *hlāba* ‘loaves’, 8 *erbum* ‘heir’ dat.pl., Ch 1197.20 *erbe*, 17 *Luba*, 20 *libġendes* ‘living’, 23 *hiabenlice* ‘heavenly’, Ch 332.16 † *Īab*, note also Ch 1200.7 *hebfad̄* for *hebbad̄* ‘they have’. Despite the apparent accuracy of these spellings, their isolated nature and the frequency of ⟨f⟩ spellings in the same or contemporaneous texts suggests that they are no more than deliberate archaisms which do not reflect the phonology of the dialect. The consistency of the spellings in EpGl, ErfGl, however, indicate that at that time, possibly only in Merc, $[\beta]$ was still an allophone of $/b/$ rather than $/f/$. Soon afterwards $[b]$ and $[\beta]$ must have split, the latter becoming an allophone of $/f/$, see §2.58. Before the time of the split it would have been possible for minimal pairs contrasting $/b/$ and $/bb/$ to have existed, such as **haβad̄* ~ *habbad̄*, see §2.53.

¹ But Med 5.10, closely related to CorpGl, has no such examples of ⟨b⟩.

² For a listing of forms and discussion, see Chadwick (1899: 232–40), also Wynn (1956: §109), Pfeifer (1974: §69).

³ In *wēobud* ⟨b⟩ may represent $[b]$, see Campbell (1959: §461n3), and *næfre*, *næbre* is of uncertain etymology. Other forms are probably Latinisms, see Brunner (1965: §191A2), Cosijn (1888a: §130), which leaves only *frēbranne* as reliable. Note, however, poetical (GenA, Exo) *tiber* ‘sacrifice’.

2.55 The voiced dental stop was represented by ⟨d⟩.¹ It contrasted only in voicing with $/t/$ and is hence transcribed as $/d/$. Examples of $/d/$ are: *dæg* ‘day’, *rīdan* ‘ride’, *tīd* ‘time’. Examples of geminate $/dd/$ are: *ġebedda* ‘bed-fellow’, *lædde* ‘he led’ against *ġebeda* ‘prayer’ gen.pl., *læde* ‘I lead’.

¹ For other, early, uses of ⟨d⟩, see §2.59.

2.56 The voiced velar stop was normally represented by ⟨g⟩, but this graph had several different values, paralleling the status of ⟨c⟩, see §2.50. Thus

⟨g⟩ represents, in addition to a velar stop, nonsyllabic [i] (§2.39), a voiced velar fricative /ɣ/ (§2.61), and a palatal approximant /j/ (§2.76), see also §2.65. The voiced velar stop was doubtless parallel to /k/ in that the possibility of velar ([g]) and palatal ([j]) allophones would exist, see §2.50, but its overall phonemic status is much more uncertain. This stems from the restricted distribution of the stop. It is generally accepted that the voiced velar stop occurred after nasals and in gemination, for example, *singan* ‘sing’, *sugga* ‘hedge-sparrow’. There is disagreement, however, over its existence initially. Brunner (1965: §206.8) and Moulton (1954: 24–5; 1972: 152–5) hold that initial *g* was a stop, whereas Girvan (1931: §214) and Campbell (1959: §50.4) believe that in eOE initially ⟨g⟩ represented a voiced velar fricative which developed as a stop by the end of the period. The evidence of palatalization shows that initial ⟨g⟩ must have represented a fricative at that time, see §§7.17(1),¹ and the negative evidence of the failure of the Ruthwell rune-maker to distinguish between initial and medial *g* (the latter certainly a fricative) strongly suggests that the stop was not developed until a fairly late stage, as Girvan and Campbell suggest.² Since the voiced velar stop and the voiced velar fricative were in complementary distribution throughout the period, it would seem reasonable to analyse them as allophones of the same phoneme, see Kuhn (1970: 33–5) and, for a contrary view, Moulton (1954: 24–7). On the other hand, the nature of the phoneme is more difficult to ascertain. In a diachronic context it seems most profitable to consider the phoneme to be /ɣ/, but for a synchronic analysis of OE it might be preferable to analyse the phoneme as /g/. On the other hand, clarity of exposition is considerably enhanced by analysing instances of the velar stop as /g/ and instances of the fricative as /ɣ/, despite their complementary distribution, and this practice will often be followed here except that examples of ⟨g⟩ indicating a velar consonant are to be found under /ɣ/ in §2.61.³

¹ For two contrary views see Luick (1914–40: §633), Lass & Anderson (1975: 134).

² But Campbell’s (1959: §429 and n) appeal to alliterative practice is by no means conclusive.

³ For further discussion of this problem see §§2.78(3), 7.68.

2.57 The OE fricatives show a three-way contrast in point of articulation, namely labial, dental, and velar. Although both a voiceless and a voiced palatal fricative may have existed at some time, the former does not contrast with the voiceless velar fricative and the latter is more revealingly classed as an approximant, see §§2.60, 75–6 for discussion. The contrast of [voice] exists only for velar fricatives; elsewhere [voice] is allophonic, see J.M. Anderson (1988b) for a fuller discussion of the phonological status of [voice] with respect to fricatives.

2.58 The labial fricative was normally represented by ⟨f⟩.¹ At the beginning of the period it is possible that this fricative was always voiceless, but it soon became voiced between voiced segments, see §§7.54–8. Since the voiced fricative which thus developed was originally distinct from the [β] represented by ⟨b⟩, see §2.54, the fricative represented by ⟨f⟩ must have been labiodental [v] rather than bilabial [β]. Therefore the labial fricative phoneme is transcribed as /f/ with, after the earliest period, two allophones [f] and [v], the latter occurring only in voiced surroundings.² Examples of /f/ are: *fæder* ‘father’, *drifan* ‘drive’, *hrōf* ‘roof’. When bilabial [β] split from /b/ and merged with [v] as an allophone of /f/, ⟨f⟩ is also introduced as the spelling of the original bilabial. Thus instead of *scēabas*, *salb* cited in §2.54, *scēafas*, *salf* are found. Apart from cases of internal juncture, giving /f+f/, as in *offaran* ‘overtake’ and numerous other forms, /ff/ is extremely rare and appears to be confined to three types: (1) proper names, such as *Offa*, *Wuffa*; (2) onomatopoeia, such as *abyffan* ‘mutter’, *pyffan* ‘breathe out’; (3) foreign (Lat) loan-words, where /ff/ is in the borrowed form, such as *offrian* ‘offer’ < Lat *offerre*, *cuffie* ‘caul’ < Lat **cuffja*, cf. ILat *cofia* ‘helmet’.³ Thus /ff/ is only a marginal member of the normal phonological inventory of OE, although no doubt the cases of /ff/ due to internal juncture and the frequency of *offrian* would promote its stability.⁴

¹ In the eMerc glossaries /ft/ is frequently represented by ⟨pt⟩, for example, compounds of *scaeft* ‘shaft’ are written *scaept-*, *scept-*. EpGl *gidopta* (= *gēðofta*) ‘companion’ shows both ⟨d⟩ for ⟨ð⟩ and ⟨p⟩ for ⟨f⟩, see §2.59nl. Chiefly in late mss., but also in poetry, for example, Beo 1799 *hliuade* ‘it towered’, [v] is represented by ⟨u⟩, for instance, *yuel* ‘evil’. The earliest examples, however, are EpGl, ErfGl 428 *siuida* ‘bran’ with ⟨u⟩ for [β] beside CorpGl 940 *sifðan*, and possibly ErfGl 768 *uūaldra* ‘butterfly’ beside EpGl *fifalde*, CorpGl 1484 *fiffalde*, where medial ⟨u⟩ is probably a scribal error, see n2 below.

² In the later periods, probably from the late tenth century, initial /f, θ, s/ were voiced in S dialects, the earliest indication of this being in the mid tenth-century Rec 3 *uīf* ‘five’, see Förster (1941). Bennett (1955) suggests that this voicing may have been prehistoric, but the evidence is unreliable. ErfGl *uūaldra*, see n1 above, is almost certainly due to an error by the German scribe (which has been transferred either to or from medial ⟨u⟩), and offers no support for Bennett’s thesis, whatever the final origins of the Merc glossaries may have been. For further discussion see §7.56.

³ A few cases of /ff/ remain. *Maffian* ‘become shameless’, *wlaffian* ‘stammer’, *woffian* ‘blaspheme’, of uncertain etymology, may be metaphorically connected to the cases of onomatopoeia, as may *lyffettan* ‘flatter’, which would otherwise presuppose **luffatjan*. For all these types see Hogg (1982a). Other forms with ⟨ff⟩ do not represent /ff/, such as EpGl *maffa* ‘caul’, a corruption of Lat *mappa*, cf. ⟨pt⟩ for /ft/.

⁴ Of course, if /ff/ is regarded as a normal OE geminate, then the relation between /f/ and /bb/ is rather different from that supposed by §2.53. No doubt such a change in relations gradually evolved during the period.

2.59 The dental fricative was normally represented by ⟨þ⟩ or ⟨ð⟩. In the earliest texts, however, these symbols were not used, the fricative normally

being represented by ⟨th⟩ or ⟨d⟩.¹ The first dated examples of ⟨þ⟩ and ⟨ð⟩ are, respectively, 803 Sweet (1885: Ct 33) *æþel-* (3×), and 700×715 Ch 21 (Cott. Aug.) *paeð*, but the evidence of the eMerc glossaries, especially EpGl, suggests that the origin of both cannot have been later than the last quarter of the seventh century.² The distribution of the dental fricative parallels that of the labial fricative, and there are two allophones [θ] and [ð], but it is more widely distributed than any of the other fricatives. The normal transcription is /θ/, and the use of the non-IPA /þ/ is to be deplored. Examples of /θ/ are: *þing* ‘thing’, *þaþian* ‘bathe’, *þæþ* ‘bath’. Examples of geminate /θθ/ are: *sceþþe* ‘I hurt’, *niþþas* ‘men’ against *sceþe* ‘hurt!’, *niþas* ‘troubles’. It is important to note that even after the introduction of ⟨þ, ð⟩ into OE orthography, these graphs are not used to reflect the allophonic distribution of [θ] and [ð]. In early texts and until the time of Alfred ⟨ð⟩ is by far the more common; in the tenth century and later ⟨þ⟩ is rather commoner, but is mainly restricted to initial position with a minority of forms medially, and it is rarely found in final position.³ The choice of ⟨þ⟩ or ⟨ð⟩ is therefore of no phonological importance, *pace* Stockwell and Barritt (1961: 78–9), see Kuhn (1970: 31fn66).⁴

¹ ⟨th⟩ and ⟨d⟩ are found only in the earliest mss., especially Bede(M), EpGl and the later LVD. To a great extent the usage of ⟨th⟩ and ⟨d⟩ parallels that of ⟨þ⟩ and ⟨ð⟩, the former occurring regularly in initial position, the latter predominating in medial and final positions and not occurring initially, although note EpGl *gidoþta* ‘companion’, CædH(M) 2 *mōdgidanc* ‘thought’. Examples of ⟨th⟩ and ⟨d⟩ are: EpGl 101 *theġn*, ErfGl 101 *deġn* ‘servant’, EpGl 572, 600 *loþa*, 898 *loða* ‘cloak’, Bede(M) † *-frid*, EpGl 425 *meaerth* ErfGl 425 *meard* ‘marten’. Doubling of ⟨th⟩ to indicate a geminate is rare, but note BDS 4 *aethþa*, cf. *oþþe*, ‘or’, and, perhaps, a simplified form † *oþte*, cited in Brunner (1965: §199A1). Very rarely ⟨t⟩ represents the fricative, examples being EpGl 619, CorpGl 1320 *earþeticust* ‘most troublesome’, Ch 89 † *sūtangli*, † *suutanglorum*, Ch 106 † *Cuutfert*. The Merc glossaries commonly show *-it* for 3sg.pr.ind., and this also appears occasionally in later texts, such as EpGl, ErfGl 1086, CorpGl 2078 *strīdit* ‘he strides’. This may be a graphic convention particular to this inflexion or a restricted phonological change, see Campbell (1959: §735b). For other examples of ⟨t⟩ for the fricative, largely in Bede(M), see Campbell (1959: §57.5n6).

² Thus EpGl has, excluding obvious errors, 19 × ⟨þ⟩, 11 initial, 4 medial, 2 final, and 8 × ⟨ð⟩, 3 initial, 2 medial, 2 final. ErfGl 601 *pōþistil* for EpGl *þūþistil* ‘thistle’ must be a misinterpretation of the Ep–Erf archetype, probably written in the last quarter of the seventh century, see Pfeifer (1974: §88). Similarly, there are four occurrences of ⟨ð⟩ in ErfGl (307, 456, 583, 997), which are unlikely to have been innovations by the German scribe.

³ There are many exceptions to this statement; note especially Ru2 which uses ⟨þ⟩ against Ru1 which uses ⟨ð⟩, and also Oros(L) where ⟨þ⟩ is predominant in all positions. Note also the variation in spelling of the geminate, as in Beo 604 *sipþan*, 283 *syþðan*, 132 *syðþan*, 6 *syððan*.

⁴ The choice may, however, be of great importance in determining the provenance of a particular manuscript, see McIntosh (1956, 1974) on ME.

2.60 The voiceless velar fricative was normally represented by ⟨h⟩.¹ To parallel the other velar consonants, see §§2.50, 56, we may assume both a palatal and a velar allophone, the former occurring between or after front vowels, the latter elsewhere. Some support is given for this by the ME evidence, see Luick (1914–40: §709), also, in respect of OE, §7.26. More important, however, is the existence of another allophone, namely the glottal fricative [h]. The distribution of [h] and [x] (including [ç]) is as follows: [h] occurs initially and, at the very beginning of the period, medially when not geminate; [x] occurs medially when geminate and finally. Medial [h] is lost by the time of the earliest texts, see §§7.46, 50, and only a few spellings remain, such as EpGl 785 *fāēhit* ‘he paints’ alongside 797 *fāēdun* ‘they painted’. Initially [h] appears before /l,r,n,w/ as well as vowels, see §2.72. The preferred transcription for the phoneme is /x/. Examples of /x/ initially and finally are: *hors*, *hros* ‘horse’, *seah* ‘he saw’. Geminate /xx/ is rather infrequent, but examples include *hlihhan* ‘laugh’, *hweohhol* ‘wheel’. Naturally no minimal pairs to contrast /x/ and /xx/ can be established.

¹ The spelling ⟨ch⟩, simplified to ⟨c⟩ most often before ⟨t⟩ but occasionally elsewhere, is found in very early mss., especially Bede(M), and persists in LVD. Examples include: Bede(M) † *Strēaneshalch*, CædH(M) 2 *maecti*, *dryctin* (2×), 9 *allmectig*, CædH(L) *dryctin* (2×). The use of ⟨c⟩ alone to represent /x/ is much rarer: Bede(M) † *Strēnes halc*, cf. above, Med 5.10 *waelcalo* ‘Welsh ale’. In gemination early texts, including EWS, use ⟨ch, chh, hch⟩. Examples include: Bede(M) † *Acha*, EpGl 171 *crocha* ‘pot’, cf. ErfGl *chroca* which suggests scribal confusion with the cognate, but difficult to explain, forms *crohha*, *crocca*, note also *pohha*, *pocca* ‘bag’ and see also §7.46n3, CP(H) *tiochiað*, *teoch[h]að*, *tiohchiað* ‘they suppose’, *pohchan* ‘bags’ (3×), LVD † *Echha*, Ch 21 † *Aehcha*. The spellings of EpGl, ErfGl are most easily accounted for if one assumes that the Ep–Erf archetype used ⟨h⟩ for /x/ and ⟨ch⟩ for /xx/. In that case only EpGl 546 *bituīcn*, ErfGl *bituīchn* ‘between’ remains difficult to explain. An unusual form is ErfGl 364 *achlocadum* ‘dug out’ dat.pl., where ⟨ch⟩ represents ⟨h⟩ in a foot-initial /xl/ cluster.

2.61 The voiced velar fricative was represented by ⟨g⟩.^{1,2} As already discussed, there were two principal allophones, [g] and [ɣ], see §2.56 for their distribution. In an historical context the preferred phonemic transcription for the phoneme is /ɣ/, although for later stages of OE the phoneme may have shifted to /g/, see §§2.56, 78(3) for fuller discussion. Probably fronted allophones occurred in the environment of front vowels, as with other velar consonants, see §§2.50, 56, 60.³ Finally [ɣ] was devoiced and merged with /x/ during, especially, the later parts of the period, see §§7.60–6. Examples of /ɣ/ are: *guma* ‘man’, *dagas* ‘days’, *lang* ‘long’. Geminate /ɣɣ/, that is, [gg], is indifferently spelled as ⟨cg⟩ or ⟨gg⟩, see Campbell (1959: §64). Examples are: *hogga* ‘hog’ gen.pl., *wicga* ‘beetle’ against *hoga* ‘care’, *wiga* ‘warrior’. The status of [gg] appears to be somewhat marginal, for it is restricted to a small group of forms, see Hogg (1982a) for further discussion.

¹ For other values of ⟨g⟩ see §2.65 and references therein.

² There are a few ⟨h⟩ spellings for this fricative, which should be regarded as inverted spellings due to the devoicing of final [ɣ], see §7.64.

³ Note in particular that on the Ruthwell Cross runic inscription the correct reading appears to be *bug[an]* ‘bow down’ rather than **buġan*, which is clearly an error and detracts from the apparent evidence in favour of the recognition of palatal variants by the rune-maker, see Ball (1988: 115) and §2.50.

2.62 The OE sibilants show only a two-way contrast in articulation, between dental-alveolar and palato-alveolar. The dental-alveolar sibilant patterns exactly as the dental nonsibilant fricative, and has an allophonic alternation of [voice], but the palato-alveolar sibilant is always voiceless. The contrast in place of articulation is probably somewhat unrevealing, and phonologically it may be preferable to contrast the sibilants as dental (alveolar) v. palatal, in view of the contrasts obtaining elsewhere in the consonantal system, or as plain v. palatalized, in terms of their historical origin, see especially §2.64. However Bülbring (1900a) has suggested that there might be some reason for supposing that /s/ could acquire a dorso-alveolar or prepalatal articulation, see further §§5.171n2, 208, 7.17(4) for some discussion of this point.

2.63 The dental sibilant was represented by ⟨s⟩. This sibilant, like the other fricatives, had two allophones [s] and [z], the latter only occurring medially between voiced segments. The phoneme is normally transcribed as /s/. Examples of /s/ are: *sittan* ‘sit’, *riſan* ‘rise’, *hūs* ‘house’. Examples of geminate /ss/ are: *cysse* ‘I kiss’, *lāssa* ‘less’ against *cyse* ‘kiss!’, *lāsa* ‘pastures’.

2.64 The palatal sibilant was represented by the digraph ⟨sc⟩. This sibilant was developed by palatalization and assibilation of the group **/sk/*, see especially §7.37. An important consequence of this is that medially the result of these changes would be the geminate /ʃʃ/, although this would never contrast with /ʃ/. It further follows that since /ʃ/ does not occur singly between voiced segments there is no voiced allophone ***[ʒ]*. Palatalization of **/sk/* occurred broadly in the following environments, see §§7.17(4) for fuller details: (1) initially, regardless of the following segment; (2) medially, except before a back vowel; (3) finally, after a front vowel and possibly elsewhere.¹ Elsewhere **/sk/* remained, and ⟨sc⟩ is used ambiguously, representing both the palatal sibilant and the cluster /sk/. In this work the former will be distinguished by a superscript dot over *c*, that is, *sċ*, see §2.65. For details of the chronological as well as phonological development of the sibilant see §§7.37–9. Examples of /ʃ/ are: *ſcīp* ‘ship’, *diſċ* ‘dish’, and geminate /ʃʃ/ is exemplified by *fiſċes* ‘fish’ gen.sg. The medial and final examples may be contrasted with medial and final /sk/ as in *ascað* ‘he asks’, *tusc* ‘tooth’ (but see n1).

¹ There are later forms, such as frequent ME, dialect PDE *tush*, cf. PDE *tusk*, which imply that /ʃ/ could develop finally even after a back vowel.

2.65 OE had two affricates, both of which may be viewed phonetically as a dental stop whose release is accompanied by friction resulting in a palatal sibilant of relatively short duration. From the phonological point of view, however, they are best viewed as a single unit, since they occur both initially and finally and behave in parallel to other single unit consonants intervocally, see Gimson (1980: 172–4) for the parallel position in PDE.¹ The only contrast between the two affricates is one of [voice], and, given their single unit status, they may best be transcribed as /tʃ/, /dʒ/. Both affricates may occur in gemination, which was doubtless due to a delay in release of the plosive; this delay may be indicated by the transcriptions /tʃʃ/, [dʒʒ], see §2.67 for the non-phonemic status of the latter. These affricates developed from Gmc */k, g = [g]/,² by the processes of palatalization and assibilation, see §§7.15, 17(3), 33. Doubtless the change from velar stop to affricate was gradual and it had probably not been completed by the time of the earliest texts, see §§2.64, 7.36. For this and other reasons, most notably the development of /tj, dj/ sequences to the same affricates, see §7.35, it would seem reasonable to assume an intermediate stage *[c, ɟ]. The voiceless and voiced affricates were normally represented in OE by ⟨c⟩ or ⟨cc⟩ and by ⟨g⟩, ⟨cg⟩, or ⟨gg⟩ respectively, see further §§2.66–7. These symbols are, of course, ambiguous, since they are equally used to represent velar consonants. In this work a superscript dot, for example, ⟨ċ, ɟ̇⟩, will be used to disambiguate the orthography as follows:³

- (1) No superscript dot will be used where the orthography represents a member of a velar phoneme, that is, /k/ (including /k/ as the second member of the cluster /sk/, see §2.64), /g/ and /ɣ/ (where the latter pair are separate), see §§2.50, 51, 56, 60n1, 61).
- (2) Superscript dots will be used where: (a) ⟨ċ, ɟ̇⟩, etc. represent the affricates /tʃ, dʒ/ (§§2.66–7); (b) ⟨ṡċ⟩ represents the palatal sibilant /ʃ/ (§2.64); (c) ⟨ġ⟩ represents either a palatal approximant /j/ (§2.76) or the high front unrounded vowel /i/ (§2.39).

It should be noted that in the case of ⟨ċ⟩ this convention, which applies equally to geminate consonants, departs from that used in Luick (1914–40: §637) and Campbell (1959: §50.4n2), see Bazell (1960: 27).

¹ The phonological analysis of the affricates as two separate units is less preferable not only on the above grounds, but also on others. Note, for example, the absence of a voiced palatal sibilant */ʒ/ except in affrication. Also relevant here is the use of ⟨z⟩ to represent /ts/ clusters, such as *bezt* ‘best’, *milze* ‘mercy’, which might seem to suggest a further affricate. But various phonological developments such as metathesis, for

example, Li *bæstere* ‘baptist’ against Rul *bæzere*, which could not occur if /ts/ were a single unit, show that this is not the case. Note also the rare spellings Rul *bædzere* (2×), Oros 143.24 *palendsan* ‘palace’ dat.sg., 104.27 *yndsán* ‘ounce’ acc.sg. for /ts/. In late texts the French use of ⟨c⟩ for /ts/ can be found, see the examples in Campbell (1959: §53).

² Recall the use of both /ɣ/ and /g/ recommended in §2.56.

³ For attempts on the part of OE scribes to disambiguate the orthography, see §2.68.

2.66 The voiceless affricate was represented by ⟨c⟩, henceforth ⟨ç⟩.¹ Examples of /tʃ/ are: *cild* ‘child’, *rīce* ‘kingdom’, *dīc* ‘ditch’. Examples of geminate /tʃ/ are: *peccen* ‘cover’ pr.subj.pl., *reccē* ‘narrate’ pr.subj.sg. against *þečen* ‘roof’, *reče* ‘narrate!’.

¹ For the use of diacritics to indicate / /, see §2.68.

2.67 The voiced affricate was normally represented by ⟨g⟩ or the digraph ⟨cg⟩, henceforth ⟨ḡ, çḡ⟩.¹ Since this affricate had developed by palatalization and assibilation of earlier *[g], its distribution was naturally rather restricted, and at first it occurs only after /n/ and in gemination. Hence /dʒ/ is found only after /n/ and finally when degeminated, examples being *senḡan* ‘sing’, *þinḡ* ‘thing’, *ecḡ* ‘edge’. /dʒ/ after /n/ and /dʒ/ finally when degeminated are commonly distinguished in the orthography, the former being spelled ⟨ḡ⟩, the latter ⟨çḡ⟩, as above. But with the process of degemination by the time of the earliest texts, see §§2.78(1), 7.80 and n3, the two spellings must have become largely equivalent in force, and as a result, perhaps, ⟨çḡ⟩ is sometimes found for ⟨ḡ⟩, especially in Nbr and late texts, for example, *cyninçḡ* ‘king’, see Brunner (1965: §215) for details. Theoretically medial [gg], when palatalized and assibilated, will not contrast with /dʒ/ and therefore no geminate /ddʒ/ need be postulated, see Kuhn (1970: 48, 49). Nevertheless, it seems sensible to retain the geminate phoneme for the sake of clarity and I do so here, without distributional justification. Examples of /ddʒ/ are: *secḡan* ‘say’, *licḡan* ‘lie’.

¹ ⟨çḡ⟩ is a replacement for ⟨ḡḡ⟩, found in the earliest texts and occasionally in later ones, examples being: EpGl 463 *seḡḡ* ‘sedge’, CP(H) 153.8 *hryḡḡe* ‘back’ dat.sg. Other variants are ⟨çḡḡ⟩ and, less often, ⟨ḡçḡ, ḡç⟩, for example, BDS 3 *hryçḡḡanne* ‘think’ infl.inf., CP(H) *secḡḡan* ‘say’ and forms (6×), 327.14 *ḡebyḡçḡḡean* ‘buy’, *hryçḡ* ‘back’ (2×). The name-element *Eçḡ-* often shows simplification in BH, BH(N) preferring *Eç-*, BH(I) preferring *Eç-*, but BH(M) prefers the full form. Note also Beo 957, 980 *Eç-*.

2.68 Although the ambiguity of the symbols ⟨ç, ḡ, sc⟩ is not regularly resolved in OE, in WS and INbr there are signs of an attempt to do so.¹ In these dialects, when *ç, ḡ* or *sc* stand before a back vowel, stressed or unstressed, a vowel is inserted between the consonant and the back vowel. It is extremely difficult to determine whether or not this vowel was purely

diacritic or indicated a genuine sound change, see §§5.59–70 for full details and discussion, but it is likely that at least in some cases the vowel was diacritical and was inserted in order to indicate the palatal nature of the preceding consonant. Relevant examples are: *sceōfan* ‘shove’, *sceolon* ‘they shall’, *sceōp* ‘he created’, *sceop* ‘poet’, *sceādan* ‘divide’, *sceacan* ‘shake’, for earlier, and occasionally alongside, *scūfan*, *sculon*, *scōp*, *scop*, *scādan*, *scacan*; *giō* ‘formerly’, *giong* ‘young’, more frequently *geō*, *geong*, *geōmor* ‘sad’, *giond*, *geond* ‘throughout’, *geāra* ‘formerly’.² The Nbr forms are similar to the above WS forms except in the following respect, that for *geong* Nbr sometimes has *giung*, although more frequently *ging* develops, see §5.64.³ Examples of the use of a diacritic vowel before an unstressed vowel, largely from CP, see below for LWS, are:⁴ *drencium* ‘drink’ dat.pl., *ēcium* ‘eternal’ dat.pl., *gefylceo* ‘troops’, *pencean* ‘think’, *secean* ‘seek’, *bisceop* ‘bishop’, *adwæsceaþ* ‘they quench’, *wysceað* ‘they wish’, *dryggium* ‘dry’ dat.pl., *menigeo* ‘multitude’, *strengo* ‘strength’, *herigeas* ‘armies’, *seçgean* ‘say’. Less usual choices of diacritic vowel are exemplified by: ClG 3.1034 *bergeum* ‘berry’ dat.pl., CP(H) 161.4 *gefylcio* ‘troops’, EpGl 659, CorpGl 1285 *menigio* ‘multitude’, and excessive zeal is displayed by Oros 117.29 *gebiggiean* ‘subdue’. The picture in LWS is rather different, for there the use of a diacritic vowel is practically non-existent in many mss. Thus in the *Homilies of Ælfric* the only regular use of a diacritic is in *bisceop*, alongside *biscop*, and the only other forms are ÆHom 6(H), 27(H) *wyrceað* ‘they make’.⁵

¹ The Nbr rune-makers also distinguished between palatalized and unpalatalized *c* and *g*, using ‘c’ and ‘g’ for the palatalized consonants, ‘k’ and ‘g’ for the velar consonants. See here §2.50 for the alleged further distinction between front and back allophones of /k/ on the Ruthwell Cross. For further details of rune-makers’ practices see Page (1973).

² Other variants of *geō* and *geong* are *iū*, *iō* and *iung*, see §5.60, esp. n2. For the general distribution and status of ⟨i⟩ for ⟨g⟩ see §2.76.

³ For occasional Merc and Kt use of diacritics after *g* only, see examples in Campbell (1959: §§174–5). Merc prefers ⟨e⟩, whereas Kt uses ⟨i⟩, for example, Merc *geond*, Kt *giond*.

⁴ Where in the following lists no example is given for a particular sequence, such as ⟨sc⟩ + ⟨u⟩, or only one example is given, such as ⟨g⟩ + ⟨u⟩, this indicates that I have noted no or only one example respectively.

⁵ Two further cases, ÆHom 23 *adrencean* ‘submerge’, *cyrcean* ‘church’, occur in ms. T, whose scribe deviates from the LWS norms, see Pope (1967–8: 735–6). These two examples occur alongside *adrenčan*, *cyrčan*.

2.69 OE nasals contrasted phonologically only as labial v. dental, although the dental nasal has at least two other allophones, see §2.71. Both nasals could syllabify when word-final after another consonant, see §§6.38–40, Kuhn (1970: 39–40). Examples of syllabic /m, n/ are: *fæðm* ‘embrace’, *bōsm* ‘bosom’, *tācn* ‘sign’, *hræfn* ‘raven’.

2.70 The labial nasal was represented by ⟨m⟩ and it is regularly transcribed as /m/. Examples of /m/ are: *meltan* ‘melt’, *niman* ‘take’, *bēam* ‘tree’. Examples of geminate /mm/ are: *fremme* ‘I perform’, *trymme* ‘I strengthen’ against *freme* ‘benefit’ acc.sg., *tryme* ‘strengthen!’.

2.71 The dental nasal was represented by ⟨n⟩. The precise articulation of this sound is no more determinable than that of the other dental consonants, and it could equally well have been alveolar. The preferred transcription, therefore, is /n/, see §2.46. Examples of /n/ are: *nama* ‘name’, *mōna* ‘moon’, *stān* ‘stone’. Initial ⟨hn⟩ more probably represented the sequence /xn/ than merely a voiceless [ɲ], although in such cases ⟨h⟩ would represent a weakly articulated glottal fricative [h] and its inherent voicelessness may well have transferred to the nasal, so that /xn/ = [hɲ], see §2.72.¹ Examples of initial /xn/ are: *hnæġan* ‘neigh’, *hnāt* ‘he struck’, against *næġan* ‘address’, *nāt* ‘he didn’t know’. Examples of geminate /nn/ are: *bannan* ‘summon’, *sunnum* ‘sun’ dat.pl. against *banan* ‘slayers’, *sunum* ‘son’ dat.pl. The use of the rune ʒ ‘ŋ’ alongside ʎ ‘n’, although of continental origin, continues in OE runic inscriptions, and demonstrates the existence of [ɲ] as a velar allophone of /n/ before velar consonants. It seems safe to deduce that /n/ always assimilated to a following consonant, and therefore a palatal allophone [ɲ] must also have existed before palatal consonants, although there is no direct evidence to support this.²

¹ It seems plausible to suggest that voiceless [ɲ] also occurred in the small group of onomatopoeic words mainly related to *fnæst* ‘puff’, but these, of course, are only a peripheral part of the normal phonological inventory of OE, see Hogg (1983).

² It is difficult to determine how ‘ŋ’ in RuthCr *kyniŋc* should be interpreted, see Ball (1988: 113–5). But it seems most likely that it represents a palatal nasal before a palatal consonant.

2.72 OE had two liquids, both best classed phonologically as dental, see 2.46, although phonetically they may have been alveolar. Of the two liquids one was lateral and the other central. Initially both liquids, like /n/ (§2.71) and /w/ (§2.77) could be preceded by ⟨h⟩ and the resultant ⟨hl-, hr-, hn-, hw-⟩ clusters have been interpreted in two opposing ways. Luick (1914–40: §636) and, apparently, J. Wright and Wright (1925: §7) interpret the spellings as signifying clusters, Luick suggesting /hl/, etc., Wright and Wright /xl/, etc. Brunner (1965: §217) and Campbell (1959: §50) interpret ⟨h⟩ as a diacritic indicating the voicelessness of the following consonant, hence /l/, etc. Kuhn (1970: 42–4) argues convincingly for an interpretation similar to that of Luick and of Wright and Wright, although we should note that very probably /xl/ was phonetically [hl] and so for the other forms. Both liquids, like the nasals, could be syllabic when word-final after another consonant, examples being *tungl* ‘star’, *hrīðr* ‘head of cattle’.¹

¹ For the interpretation of the more common forms of syllabic liquids, where an epenthetic vowel occurs, see §§6.38–40.

2.73 The lateral liquid was represented by ⟨l⟩ and is usually transcribed as /l/. Examples of /l/ are: *lamb* ‘lamb’, *talū* ‘tale’, *smæl* ‘narrow’. Examples of initial /xl/ are: *hlænan* ‘incline’, *hlāf* ‘bread’ against *lænan* ‘lend’, *lāf* ‘remainder’. Examples of geminate /ll/ are: *fella* ‘skin’ gen.pl., *syllē* ‘I give’ against *fela* ‘many’, *syllē* ‘give!’. It is most probable that there were two significant allophones of the phoneme, /l/ being velarized between back vowels or when preceded by a back or a low front vowel and followed by a consonant, for further discussion see Kuhn (1970), also §5.15. It is also possible, but not yet demonstrated, that /l/ might have been palatalized when the result of WGmc gemination.

2.74 The central liquid was represented by ⟨r⟩. The most common interpretation of this symbol is that it represented an alveolar trill except before consonants, where it was probably retroflex, see, for example, Sweet (1957: §3). Neither of these articulations seems compelling. Both earlier developments, such as the shift of *z > r in Gmc, see §4.15, and PDE pronunciation would suggest that either a fricative, flap, or tap articulation was more probable. However, before a consonant the body of the tongue must have been considerably raised to promote some degree of velarization, see Hogg (1971), Lass (1977), and so permit breaking to occur, see §5.16.¹ The most accurate transcription of the phoneme might therefore be /ɾ/, with a velarized allophone [ɾ̠]. However, both for convenience and in view of the indeterminacy of the precise articulation we shall adopt the transcription /r/ (with relevant allophonic variants). Rexamples of /r/ are: *rīdan* ‘ride’, *berab* ‘bear’, *fȳr* ‘fire’. Examples of initial /xr/ are: *hræcan* ‘spit’, *hrēod* ‘reed’ against *ræcan* ‘reach’, *rēod* ‘red’. Examples of geminate /rr/ are *dēorra* ‘dearer’, *māerra* ‘more famous’ against *dēora* ‘dear’ wk., *māera* ‘famous’ wk.

¹ For the view that ⟨r⟩ may have represented a uvular fricative or trill, of the type /R/, see Lass and Anderson (1975: 85–9), Lass (1977), and, for a contrary view, Howells (1987). One must also accept that it is unlikely that all OE speakers had the same or very similar pronunciations of the central approximant, given the variability in the pronunciation of the sound both in later periods of the language and in PDE.

2.75 OE had two approximants (frictionless continuants) which contrasted as front v. back, the front approximant being palatal, the back one being labiovelar. Although the term approximant is preferable to ‘semi-vowel’ or ‘glide’, it is not entirely satisfactory, since the historical development of the approximants would suggest that they may have had weak friction in some cases, see §7.15, Hogg (1979b: 103–4). Despite this implied phonetic inaccuracy, the term approximant is phonologically preferable, since the sounds

concerned do not pattern similarly to fricatives. Both approximants are very restricted in distribution, appearing only before syllabic segments or word-finally,¹ and neither form geminate clusters, see however §§3.16–18. When either approximant originally followed a vocalic segment but was not itself followed by a syllabic segment, it might vocalize to the corresponding vowel, see §§2.38–40 for examples, §7.69 for discussion.

¹ Note especially that approximants can therefore appear before syllabic nasals and liquids. Hence *þegn* ‘servant’ may represent /θeɲn/ rather than /θein/, see however §7.71. For further discussion of the distribution of approximants see Lass and Anderson (1975: 9–14).

2.76 The front approximant was most commonly represented by ⟨g⟩, henceforth ⟨ġ⟩, see §2.65, less commonly by ⟨i⟩. Since this sound was a palatal approximant it is normally transcribed as /j/. Examples of /j/ are: *ġēar* ‘year’, *herġas* ‘armies’, *byrġ* ‘cities’. According to the principles stated in §2.68, the palatal nature of /j/ is often indicated by the diacritical use of ⟨i, e⟩ before back vowels, see §2.68 for examples. ⟨i⟩ represents the approximant most commonly in the earliest texts and primarily in initial position, examples being: EpGl, ErfGl 958 *iesca* ‘sobbing’, cf. CorpGl 1865 *ġesca*, BDS 3 *hiniongae* ‘departure’ dat.sg. But throughout the period ⟨i⟩ frequently replaces ⟨ġ⟩ before /u/ and in loan words, examples being: *iū* ‘formerly’, *iung* ‘young’, *Iōhannes*, *Iēsus*.¹

¹ The spelling ⟨iġ⟩ is not often used as a compromise between ⟨ġ⟩ and ⟨i⟩ for /j/, but rather either to indicate a sound change, as in *byriġ* ‘cities’, see §§6.43–4, or, possibly, as a compromise spelling for /i/, but see §7.69. On the other hand, the regular gen.dat.sg. *hālīġes*, *hālīġe* of ÆHom may be either a spelling for /j/ or due to epenthesis between a liquid and an approximant, see Pope (1967–8: 184–5) and §7.76n2.

2.77 The back approximant was most commonly represented by ⟨w⟩, or, rather, the runic symbol þ (wynn), see §2.2, less commonly by ⟨u⟩ or ⟨uu⟩. This sound was undoubtedly labiovelar and the preferred transcription is /w/. Examples of /w/ initially and medially are *wind* ‘wind’, *snāwas* ‘snows’. Finally /w/ should not occur, see §§4.9, 7.72–3, but ⟨w⟩ is often found there although without certain phonological implication, hence *snāw* ‘snow’. In the earliest texts and continental mss. runic ⟨þ⟩ is most infrequent and is regularly replaced by ⟨u, uu⟩.¹ Hence EpGl has only nine cases of ⟨w⟩ alongside frequent ⟨u, uu⟩, such as 1014 *wand* ‘mole’ beside 1045 *uuandaeuuiorpae* ‘mole’, whilst the continental ErfGl has no instances of ⟨w⟩.² CorpGl has all three spellings. A number of mss., especially CP(H), use ⟨u⟩ postconsonantly, ⟨w⟩ elsewhere. ⟨u, uu⟩ are most common in Nbr, being used throughout the period. Examples are: CH(M, L) *uard* ‘guardian’, *uerc* ‘work’, *uundra* ‘miracle’ gen.pl., BDS *uuuurthit*, *uueorthae* forms of

‘become’, LRid *uēta* ‘wet’, *uong* ‘plain’, Li *huelc* ‘which’, *giuias* ‘thou askest’, *uulfes* ‘wolves’.³

¹ Nevertheless ⟨w⟩ appears in a dated text as early as 685×694 Ch 1117 † *Writolaburna*, † *triow* ‘tree’.

² ErfGl normally replaces ⟨w⟩ by ⟨u, uu⟩, but 173 *pindil* for EpGl *windil* ‘basket’ and 1059 *uuidubindae* for *wi(d)uwindae*, CorpGl 2158 *uuduuuinde* ‘bindweed’ shows the continental scribe’s unfamiliarity with ⟨p⟩.

³ LNbr shows a number of further variations, with ⟨wu⟩, and hence ⟨wo⟩ occasional ⟨o⟩, such as Li *geðuoā*, *geðoa* ‘wash’. Forms such as Li *oeg* ‘way’ are ambiguous, but probably arose due to a reluctance to double ⟨o⟩, see Brunner (1965: §172A), and hence equal *woeg*.

2.78 Of the various changes to the OE consonant system which occurred during the period, three pose special problems of phonological classification, and are mentioned below in addition to the discussion above.

- (1) It is assumed above that OE had geminate consonants only in medial position, but it is probable that geminate clusters existed finally in the earliest parts of the period. Hence contrasts such as *brocc* ‘badger’ against *brōc* ‘affliction’, see §2.50 for the medial contrast, must have existed at that time. However, even very early texts show variation between geminate and single spellings, for example, EpGl, ErfGl 243 *bedd*, 971 *bed* ‘bed’, and this indicates early degemination, see further Kurath (1956: 435) and the discussion and further references in §§7.80–1.¹
- (2) It is probably impossible to determine when palatal [c, ʃ] completed their development into affricates, see §2.65. They are classed as affricates here because by the time of the earliest texts they were phonologically distinct from velar [k, g] and because they had undoubtedly become affricates before the end of the period.
- (3) We have already discussed (§§2.56, 61) the problematic phonetic status of [g] and [ɣ], when it was suggested that diachronically the preferred analysis might be /ɣ/, but synchronically it might be /g/. On the other hand, the use of both /ɣ/ and /g/ was advocated for the purpose of exposition. The diachronic preference for /ɣ/ is based primarily on the fact that palatalization of *g > /j/ (except after nasals and in gemination) is scarcely explicable if we assume */g/, *pace* the views noted in §2.56n1. The synchronic analysis of /g/ is often justified on the grounds that a phonemic system with /ɣ/ but not /g/ is highly marked, but this is somewhat weakened by the fact that such a phonemic system appears to be a typological feature of the North Sea Gmc languages, for example, OFris, OSax (Moulton, 1972: 155–60) and also ModFris (Cohen et al., 1961: 122–3), see also Hogg (1979b). Probably more crucial,

therefore, is the phonetic status of initial *g*. We have already noted that since initial **g* palatalizes to a fricative, it must at the time of palatalization have been a fricative itself. On the other hand, initial **g* undoubtedly had become a stop before the ME period, and although no precise dating can be established, it is most probable that it was a stop in the later periods of OE. As such the synchronic analysis of /*g*/ is probably the preferred analysis for those periods. Nevertheless, the picture is made more complex by the status of [gg]. Naturally [gg], which was undoubtedly a geminate stop, could only arise by processes other than WGmc gemination, since [gg] by that process develops as /dʒ/. The problem is that the words which contain [gg] are not only of dubious etymology but are also members of a clear semantic set, largely animal pet-names, such as *docga* ‘dog’, *frogga* ‘frog’, **picga* ‘pig’, **stagga* ‘stag’, *sugga* ‘sparrow’, *wicga* ‘earwig’.² As such, the status of [gg] is rather less clear than it might be, since it would seem to have some phonaesthetic or similar force, see Hogg (1982a). Interestingly, if degemination were earlier than devoicing of final fricatives, which is, alas, unlikely, [g] and [ɣ] would contrast finally: *hogg* ‘hog’ against **hog-*, as in compounds of the type *hohful* ‘mindful’.

¹ Doubling of letters is quite common in runic inscriptions, and this could be the source of double consonants in Li and Ru2, such as *scipp* ‘ship’, *begeattas* ‘they obtain’. It is more likely, however, that they indicate the shortness of the preceding vowel, see Luick (1914–40: §§670–1) and, for the runic evidence, Page (1962).

² But note *sceaega* ‘hair’, which is possibly a borrowing from ON. For *floggian* (Brunner, 1965: §216.2) read *flocgan*, cf. PrudG11 *flocgest* = Lat *emices*, where an affricate is clearly plausible.

2.79 From the above discussion it is possible, maintaining the reservations of §2.41, to suggest the following consonant system for OE:

	<i>Labial</i>	<i>Dental</i>	<i>Palatal</i>	<i>Velar</i>
Voiceless stops	/p/	/t/	–	/k/
Voiced stops	/b/	/d/	–	–
Voiceless fricatives	/f/	/θ/	–	/x/
Voiced fricatives	–	–	–	/ɣ/
Sibilants	–	/s/	/ʃ/	–
Affricates	–	/tʃ, dʒ/	–	–
Nasals	/m/	/n/	–	–
Liquids, approximants	–	/l, r/	/j/	/w/

2.80 In isolation OE syllables divided into two types: heavy and light. In stressed positions heavy syllables had a minimal rhyme structure of -VVC or -VCC, for example, *stān* ‘stone’, *word* ‘word’, whilst light syllables had

the structure -VC, for example, *scīp* ‘ship’.¹ In stressed positions extra-heavy syllables of the types -VVCC, -VCCC, -VVCCC could occur, such as *hēold* ‘he held’, *fyrst* ‘period’, *ēhst* ‘thou persecutest’ (< **ēhtst* < **ēhtest*), but the type -VVCCCC as in **ēhtst* does not seem to have occurred. In unstressed positions everywhere, only light syllables and heavy syllables of the type -VCC occurred, such as *dægēs* ‘day’ gen.sg, *Hālend* ‘Saviour’. Additionally extra-light syllables of the type -V could occur both medially and finally, such as *lufode* ‘he loved’. It also seems probable that unstressed syllables containing only a resonant could occur, hence *hræfn* ‘raven’, but see §§6.38–40 for discussion and examples. The different restrictions on syllable weight in stressed and unstressed positions mean that there is fluctuation in vowel length in words subject to variable stress, notably non-lexical items such as pronouns, such as *hē* ‘he’, *swā* ‘so’.

¹ V indicates a short vowel or diphthong, C indicates a short consonant, whilst VV indicates either a long vowel or a long diphthong and CC indicates either a sequence of consonants or, medially, a geminate consonant.

2.81 There is some evidence from OE stress, see McCully and Hogg (1990: esp. 321), that in polysyllabic words the division of syllables followed the principle that intervocalic consonants should be assigned to the following syllable wherever possible, hence [*stā*][*nas*] ‘stones’, etc. Where the intervocalic consonant was a geminate, however, it seems more likely that the syllable division intervened, so that the structure was of the type [*frem*][*man*] ‘perform’. However, if this principle of syllable division resulted in an over-light stressed syllable of the type -V, for example, [*sci*][*pu*] ‘ships’, it seems likely that a process of ambisyllabification occurred so that the intervocalic consonant belonged to both the coda of the stressed syllable and the onset of the following syllable, for example, [*sci*][*p*u]. There is no evidence that the same process occurred if the stressed syllable already had the minimal structure proper to stressed syllables, hence the /n/ in [*stā*][*nas*] remains a member of the second syllable only and is not ambisyllabic, see Colman (1986). Nor does the process of ambisyllabification operate in unstressed syllables, which can always be extra-light, see §2.80.

2.82 It is, however, clear that word-boundaries overrode the principles of ambisyllabification outlined in §2.81, so that in compound words syllable-boundaries and word-boundaries would coincide, for example, [*hēah*][*engel*] ‘archangel’, [*gūþ*][*rinc*] ‘warrior’. But many historical compounds were no longer synchronically analysed as such in OE, and thus we find original compounds which come to be syllabified in the same way as in simple lexemes, for example, [*wo*][*r*old] ‘world’ < **wer-ald*, [*o*][*n*et][*tan*] ‘hasten’ < **an-haitjan*. This is the explanation of the back formation *ræfnan*

'performs' from *aræfnan* 'perform' < **or-aβnjan*. The resyllabification would promote confusion of *æ*- and *or*- prefixes, see §2.88n4.

2.83 The phonotactics of OE syllables as they pertain to consonantal onsets and codas do not often differ significantly from those in PDE, see Gimson (1980: 237–53). The discussion below, therefore, considers only the more important contrasts between OE and PDE, firstly in onsets and secondly in codas. For further discussion of these contrasts see Lutz (1988).

- (1) A number of onset clusters are found in OE which are not found in PDE. Of these the most important are clusters of /w/ + liquid, that is, /wr-, wl-/ , as in *writan* 'write', *wlanc* 'proud'. Whereas /wr-/ clusters are extremely common, /wl-/ clusters are relatively infrequent. It is noticeable that such clusters violate the so-called 'sonority hierarchy', whereby less sonorous segments should be closer to the margins of the syllable, see Hogg and McCully (1987: 32–4) and references therein, also Lutz (1988). Rather less significant but yet of interest are the initial sequences of /x/ + resonant, that is, /xw, xl, xr, xn/, which begin to be lost at the end of the OE or beginning of the ME period, see §7.48. The infrequent initial cluster /fn-/ , for example, *fnæsan* 'sneeze', remains throughout OE, to be lost much later in ME or, perhaps, be replaced by /sn/, see Hogg (1983). Finally, it is of interest to note that in OE poetry the groups /sp, st, sk/ alliterate only with themselves, as in, for example, Beo 1409, cf. Beo 1569 where /sw/ alliterates with /s/, and this suggests that these groups filled a single slot in the onset structure, as in PDE.
- (2) Perhaps the most important feature of codas is that clusters of the type nasal + homorganic consonant occur with labials and velars as well as dentals, hence *lamb* 'lamb' = /lamb/, *bring* 'ring' = /xring/, in addition to *hand* 'hand' = /hand/. Where a consonantal cluster forms the coda of an extra-heavy cluster, it would appear that the final consonant must be a dental, a situation not dissimilar to PDE.

2.84 OE had, like PDE, a stress-based system of accentuation, and in this respect differed from late IE, where a pitch-based system of accentuation existed, see §3.4. Furthermore, in OE, as elsewhere in Gmc, stress soon came to be fixed upon the first syllable of a word, that is to say, OE developed a 'left-strong' stress system. The evidence for stress patterns derives from four sources: (1) sound changes restricted to stressed syllables, such as palatal diphthongization (§§5.47ff.); (2) loss or reduction of weak-stressed elements (Chapter 6); (3) metrical and alliterative practice; (4) the assumption, where the evidence permits, of an unchanging stress system throughout the

history of English. It should be noted, of course, that (4) cannot be wholly correct, since PDE has a 'right-strong' system of stress, see McCully and Hogg (1990) for further discussion. Furthermore, it has to be recognized with respect to (3) that however close the rhythms of OE poetry may have been to normal speech, the two sets of rhythms could not have coincided completely, see Daunt (1946), also McIntosh (1949). The stress system presented here is intended only as an approximate guide to the stress system of 'normal' OE speech, and hence, although it should not contradict the metrical system of OE, it should not be taken as an analysis of metrical stress, except where specifically stated.¹ It should be clear, therefore, that the status of the outline below is even more hypothetical than the remarks elsewhere in this work, and they should not be considered to be in any way factual.

¹ The fundamental works on OE metrics are Sievers (1885, 1893a, 1893b), importantly revised by Bliss (1962). For another view see Pope (1942), also Heusler (1925–9). A segmental generative account is presented in Halle and Keyser (1971: 87–97), and a non-linear account is given by McCully and Hogg (1990). Other important recent works include Russom (1987), Suphi (1985, 1988).

2.85 The reconstruction of OE phrasal accent is entirely reliant on metrical analysis, and it is possible only to outline the general principles underlying that. Naturally in any given phrase or sentence these principles must be flexibly interpreted, since syntactic structure or rhetorical emphasis, amongst other factors, can change patterns of intonation and stress radically. Nevertheless, it is possible to distinguish three types of word category in relation to phrasal accent:¹

- (1) Type I words are those lexical items which normally both are stressed and receive tonic accent. The word-classes belonging to this type are nouns, adjectives, adverbs, including infinitives and participles when they function syntactically as nouns and adjectives respectively.²
- (2) Type II words are those lexical items which are normally stressed but do not normally receive tonic accent. The word-classes belonging to this type are verbs and adverbs. Note that adverbs may therefore be either Type I or Type II, although they are normally the latter. There is a hierarchy of word-classes, such that nouns and adjectives receive tonic accent in preference to adverbs, whilst adverbs receive tonic accent in preference to verbs.
- (3) Type III words are generally non-lexical items which normally both are unstressed and do not receive tonic accent. The word-classes belonging to this type include pronouns, quantifiers, prepositions, and conjunctions.

The contrast between lexical and non-lexical items is particularly significant in considering the variable stress of affixes and similar forms. Thus a suffix such as *-lic* may be either (secondary-)stressed or unstressed, according to whether it is affixed to a lexical or non-lexical item: it will have secondary stress in *gēlustfullīce* ‘joyfully’, but be unstressed (with consequent syncope) in **hwa-lik > hwelīc* ‘which’.

¹ The standard work on sentence accent (from the point of view of poetry) is H. Kuhn (1933). Fakundiny (1970) valuably emphasizes the flexibility of the system, see too Slay (1952).

² Of course, when infinitives or participles are syntactically verbal, then they have the same characteristics as any other verbal form.

2.86 The general principles underlying OE word stress appear to be as follows, see McCully and Hogg (1990) for a fuller account. Firstly, stress was assigned on a left-to-right basis in words. Secondly, only heavy syllables may be stress-bearing, except in the case of initial (leftmost) syllables, which may bear stress even if light, provided that they are followed by an unstressed syllable. Thirdly, the leftmost stressed syllable in a word receives primary stress, and all other stressed syllables receive secondary stress. The following morphological elements were capable of bearing stress: (1) the root morphemes of lexical items, see §2.85; (2) prefixes of nouns and adjectives; (3) derivational suffixes which were historically free morphemes; (4) second elements of proper names. These four types are discussed separately in §§2.87–90 below, and exceptional cases are discussed in §2.91.

2.87 No problems are presented by words with only one root morpheme, where the first syllable is always stressed, for example, *wórd* ‘word’, *ýfel* ‘evil’, *wrēon* ‘cover’. In such words the addition of an inflexional syllable has no effect, for example, *wórdes* gen.sg. If a further syllable in the morpheme is heavy, then it bears secondary stress, but only if that syllable is not final. Hence the addition of inflexional endings characteristically alters stress patterns, for example, *ápelīng* ‘prince’ but *ápelīngas* ‘princes’.¹ In compounds both root morphemes naturally have at least one stress-bearing syllable, but again it is only the leftmost syllable which bears primary stress.² Typical examples are: *stéfcrcæft* ‘grammar’, *gámolfēax* ‘grey-haired’, *híldfruma* ‘prince’, *fýrhēard* ‘fire-hardened’, *gūþgēlāc* ‘battle’, *mánfordædla* ‘criminal’. An important subgroup of compounds are those compound verbs where the first element of the compound is a separable prefix originally derived from a preposition. These prefixes can be divided into three groups; (1) prefixes occurring only as separable prefixes: *æfter*, *fore*, *from*, *mid*, *ongēan*; (2) prefixes identical to stressed inseparable prefixes, see §2.88: *æt*, *bī*, *inn*, *ofer*, *tō*, *þurh*, *under*, *ymbe*; (3) prefixes identical in form to unstressed

inseparable prefixes, see §2.88: *of*, *on*, *wip*.³ When the prefix remains with the verb the stress pattern is as for other compounds, such as *ímgangan* ‘enter’, *éfterspýrian* ‘inquire’. Naturally, the root morpheme of the verb becomes primary-stressed when the prefix is separated from the verb.

¹ In forms such as *cýningas* ‘kings’, the second syllable is unstressed since the first syllable is light, see §2.86 for this restriction on stressed initial syllables.

² Sievers’s claim (1893b: §§6.2, 15.3c, 15.4c) that some compounds might have two primary stresses, for example, Beo 37 *of féorwégum* ‘from a distance’, 1155 *éorþcýninges* ‘earthly king’ gen.sg., is implausible. Where such forms must carry two primary stresses metrically, as with *éorþ cýninges*, they should be analysed as two separate words, on the analogy of Beo 1210 *feorh cýninges*, 2912 *fyll cýninges*.

³ Note Max 1 *wipre healdap* ‘resist’ with the stressed form of the prefix. Elsewhere the unstressed forms of *of*, *on*, *wip* have been generalized, except, of course, where the prefix is stressed and inseparable, see §2.88.

2.88 In §2.84 it was observed that, whereas in the earliest periods of Gmc stress was variable, it soon came to be fixed upon the first syllable of a word. Consequently the initial syllables of OE words were stressed regardless of whether or not the initial syllable was part of a root morpheme. If the initial syllable was (part of) a prefix, then the root morpheme would still carry stress, but of course, by §2.86, that stress would be secondary. Examples are *ándgít* ‘sense’, *órlæahtré* ‘blameless’. This, however, holds only for nouns, adjectives and adverbs. In verbs at the time of the Gmc accent shift the verbal prefixes, unlike the nominal and adjectival prefixes, were not yet compounded with the verb but were unstressed proclitics of verb phrases. As a result, verbal prefixes were not normally stressed in OE (except, of course, the separable prefixes discussed in §2.87), and the first stressed syllable of inseparably prefixed verbs is usually the first syllable of the root morpheme, hence *forbærnan* ‘burn up’, *ofercúman* ‘overcome’, cf. nouns such as *fórwyrd* ‘ruin’, *ófermægen* ‘superior force’. As a result of these contrasting stress patterns, minimal pairs exist, with nouns and adjectives showing the development of the stressed prefix, verbs showing the development of the unstressed prefix. The principal minimal pairs are:

* <i>a-</i>	<i>éþþànca</i>	‘offence’	<i>ofþýncan</i>	‘displease’
* <i>ana</i> ⁻¹	<i>ángrin</i>	‘beginning’	<i>angínnan</i>	‘begin’
* <i>and</i> ⁻¹	<i>ándsaca</i>	‘apostate’	<i>ansácan</i>	‘deny’
* <i>at</i> ⁻²	<i>ætspýrning</i>	‘offence’	<i>otspúrnan</i>	‘stumble’
* <i>bī-</i>	<i>bīgenga</i>	‘inhabitant’	<i>begán</i>	‘occupy’
* <i>inn</i> ⁻³	<i>ínstæpe</i>	‘entrance’	<i>instæppan</i>	‘enter’
* <i>unþ-</i>	<i>úþgenga</i>	‘evanescent’	<i>oþgán</i>	‘escape’
* <i>us</i> ⁻⁴	<i>ælæte</i>	‘divorcée’	<i>alætan</i>	‘let go’
* <i>us</i> ⁻⁴	<i>órþanc</i>	‘mind’	<i>apéncan</i>	‘devise’
* <i>wipar</i> ⁻⁵	<i>wipersaca</i>	‘adversary’	<i>wipsácan</i>	‘refuse’

Other prefixes which may precede either nouns or verbs show no distinction between stressed and unstressed forms. The principal examples are: *æfter*-,⁶ *ed*-, *for*-, *fore*-, *mis*-, *ofer*-, *tō*-,⁶ *þurh*-, *un*-, *under*-, *up*-,⁶ *ymb*-, cf. typical examples above.⁷

¹ The unstressed form of **and-* (= **ant-*) has been lost, or, possibly, merged with the unstressed form of **ana-*, and in either eventuality the unstressed forms of **and-* and **ana-* are identical in OE. Hence amongst stressed forms a considerable number of doublets are found, such as *andfeng*, *anfeng* 'seizing'. For the variation between *an-* and *on-* see §§5.3–6.

² The unstressed form *ot-* is rare: Ps(A) *otēawan* 'show' (frequently, beside *od-* 1×), *otēctun* 'they added', *otspurne* 'strike' 2sg.pr.subj., ProvGl *otsperniçe* 'offence', cf. *ætspyrning*. Otherwise *ot-* is replaced by either *æt-* or *oþ-*, the unstressed form of **unþ-*.

³ Since *-m-* would degeminate except intervocalically, the stressed and unstressed forms are usually identical as here. But intervocalically geminate forms can be found, such as *imnylfe* 'bowel'.

⁴ The normal development of the stressed prefix is to *or-*, but OE, OSax, OFris show a development to *ā-*, *ā-* as well, probably due to loss of **t/* with lowering and compensatory lengthening, although the development is obscure, see §3.20 for some possibly related developments. The unstressed prefix always loses **t/* except in *aræfnan* 'perform', see §2.82.

⁵ But occasional forms such as *wipercwepan* 'resist', *wipersacian* 'blaspheme' show extension of the stressed prefix, either from participial forms with adjectival stress or from related nouns, such as *wipercwepness* 'contradiction', *wipersacung* 'blasphemy'.

⁶ These prefixes may also be separable, in which case they are stressed when separable prefixes of verbs, see §2.87.

⁷ For exceptions to the above see §2.91(2).

2.89 The third group of elements capable of being stressed comprises those derivational suffixes which were historically derived from free morphemes. The principal suffixes concerned are: *-bære*, *-bora*, *-cund*, *-dōm*, *-fæst*, *-feald*, *-full*, *-hād*, *-lāc*, *-lēas*, *-līc*, *-rāden*, *-scīpe*, *-sum*, *-weard*. Historically such suffixes must have behaved like the second elements of compounds, so that stress patterns such as *lústbære* 'agreeable', *gódcund* 'sacred', *wúldorfull* 'glorious', *dréamlēas* 'joyless', *éorlscīpe* 'courage' would have occurred, but the status of these elements appears to have been gradually obscured during the period, so that words containing such suffixes are treated parallel to forms such as *æpeling* discussed in §2.87, and the suffixes bear secondary stress only if they are disyllabic by either origin or inflexion. Where stress is lost in monosyllabic suffixes, then long vowels are naturally shortened, for example, *cýnedom* 'kingdom' < *cýnedōm*. Evidence for variability of stress is found in words where the suffix has developed according to the pattern of unstressed syllables, such as *hlāford*, *hlāfordes* 'lord', *fulluht*, *fulluhtes* 'baptism', alongside stressed forms PPs *hlāfwearde* 'steward', Ch 634 *fulwiht*, *fullwihtes* (more frequent).

2.90 Quite parallel to the forms discussed in §2.89 are the second elements of proper names, for these elements were also variable in stress in exactly the same way. Examples are: *Hróþgar*, *Béowulf*, but *Hróþgâres*, etc.

2.91 In this section are discussed firstly the principal exceptions to the rules of compound stress and secondly those to the rules of word stress, particularly as they affect prefixes.

- (1) The main group of exceptions to the rules of compound stress discussed in §2.87 consists of compound adverbs. In these cases the stress system applies as if the two elements were phrasally joined, and hence the stress patterns are initially determined by the rules of phrasal stress, see §2.85. Thus compounds where the first element is a preposition and the second element is a noun adverb are always stressed on the second element, for example, *todæg* 'today', *onbæc* 'behind', *befóran* 'before', *begéondan* 'beyond'. In such cases the unstressed first element is often reduced, for example, *bæftan* 'behind', *būtan* 'without', *bufan* 'above', *binnan* 'inside' against *beæftan*, *beūtan*, *beufan*, *beinnan*. Similarly the prefix *full-* is unstressed in *fulloft* 'very often', etc. Where both elements of the compound are non-lexical and therefore unstressed in isolation, but the compound adverb is lexical and stress-bearing, the position is less clear, but the adverbial conjunctions *þā* and *pær* seem always to be unstressed, for example, *nūþa* 'now then', *þagūt* 'as yet', *þærinne* 'therein'. On the other hand the quantifying adverb *eall* seems, as would be expected, always to be stressed, for example, *éallswa* 'so', *éalneġ* 'always'.
- (2) The principal cause of variation in the stress system of prefixed forms is the contrasting stress patterns of nouns and verbs discussed in §2.88. The consequence of this contrast is that the nominal and verbal stress systems compete with one another and that therefore, for example, nouns which are derived from verbs (or felt to be so derived) may take the verbal stress pattern. We may distinguish five types where an unexpected stress pattern is found: (a) deverbal nouns; (b) denominal verbs; (c) participles; (d) forms with the prefix *un-*; (e) forms with the prefix *ġe-*. These are discussed separately below.

(a) Where nouns are derived from complex verbs the nominalization has no effect on the stress pattern, and so initial prefixes remain unstressed, for example, *forġifness* 'forgiveness' < *forġifan*, *alýsing* 'redemption' < *alýsan*, *onscúnung* 'abomination' < *onscúnian*. This process is particularly common when the prefix is *be-* (= accented *bī-*) and *for-*, and in these cases the unaccented forms of the prefix predominate even amongst nouns, for example, *bebód* 'command', *behāt*

‘promise’, *forbód* ‘prohibition’. However, in a number of instances, especially where the derivational relationship is less transparent, the normal nominal pattern is followed, and forms with stressed prefixes are found, such as *bíspèll* ‘proverb’, *fórwýrd* ‘ruin’ (alongside *forwýrd*).^{1,2}

(b) Similarly, where verbs are synchronically derived from nouns the verb formation process does not affect stress, and hence initial prefixes remain stressed, for example, *ánds wàrian* ‘answer’ < *ánds wàru*, *fúltùmian* ‘help’ < *fúltùm*, *ándwýrdan* ‘answer’ < *ándwýrde*.³

(c) Although participles are syntactically often adjectival, so that they should have stress on the prefix, it is more common for them to follow the stress pattern of the verb from which they are derived, for example, *underþéoded* ‘subjected’. Nevertheless, occasional forms can be found with stress on the first element, showing the syntactically expected stress pattern, such as *únderþéoded*. Hence participles such as *wíþerhýcgende* ‘hostile’ show the stressed prefix *wíþer-* rather than *wíþ-*, see §2.88.

(d) The negative prefix *un-* occurs mainly with nouns, adjectives and adverbs and so should always bear primary stress, for example, *úncleêne* ‘impure’, *únsmeþe* ‘rough’. But sometimes the primary stress is transferred to the root syllable, for example, *uncléene*. Doubtless such transference is due to the synchronic productivity of *un-* as a prefix capable of negating any suitable form. Further evidence for this is possibly found in the replacement of the unstressed prefix *an-* (*on-*) by *un-* in verbs such as *unbíndan* ‘unbind’ (alongside *onbíndan*).

(e) The prefix *ge-* was never stressed in Gmc, even in nouns, see Bennett (1972: 109–10), and thus forms such as *gescéaft* ‘creation’ always have stress on the root syllable.⁴ Most such forms may be taken under §2.91 (2a) but the same holds for forms not synchronically related to verbs, such as *gelíc* ‘like’.

¹ Similarly *béot* ‘promise’ is found beside *behāt*, where the different stress pattern has permitted loss of *h* and hiatus resolution.

² The expected stressed form of *for-*, namely *fra-*, occurs only in *frétwe* ‘ornaments’ and its derivatives and *frácoþ* ‘wicked’. That the prefix is no longer analysed as such can be seen from examples such as *gefrétwode* ‘adorned’, see too n4.

³ This is also the case at least in *ónettan* ‘hasten’ where the derivation from a noun has been obscured. The synchronic status of *ándettan* ‘confess’ is less certain, cf. various derived forms of **andett* and perhaps the predicative noun *ándetta* ‘confessor’.

⁴ A possible exception is *geátwe* ‘armour’, cf. *getáwe* ‘equipment’. The parallel development of *frétwe* and the existence of Goth (*us*)*fratwjan* ‘equip’ without medial vowel both suggest the possibility of an earlier abnormal development which does not contradict the unstressed value for **ga-* in Gmc, see Luick (1914–40: §314A2). For another view see Streitberg (1896: §143) but compare Bennett (1972: 110fn6). For the length of *a* in *getawe* see Pope (1942: 322).

The vowels in Germanic

I Primitive Germanic

3.1 It is not possible within the scope of this work to give more than a brief outline of the development of vowels in Germanic prior to the period of Old English. Nor is any attempt made here to discuss the vowel system of Indo-European. Further, particular attention is paid only to those developments in later periods of Germanic which lead directly to the evolution of the OE vowel system. Fuller discussions of the Germanic material may be found in works such as Prokosch (1939), Krahe and Meid (1969), and the contributions in van Coetsem and Kufner (1972), especially Antonsen (1972) and Bennett (1972).

3.2 Given the arbitrariness of any starting-point it is most convenient to use as our initial stage the period when Germanic had become clearly distinct from the other IE languages but before the time of the Germanic accent shift (see §3.4). For this period of Primitive Germanic we may reconstruct a vowel system consisting of six long vowels, four diphthongs, and four short vowels. The diphthongs consisted of /e, a/ together with a high element which could be either front or back. This gives a system as follows:

(a) Long vowels

i: u:
e: o:
æ: a:

(b) Diphthongs

ei eu
ai au

(c) Short Vowels

i	u
e	
a	

3.3 The system of long vowels and diphthongs postulated in §3.2 underwent modification at the very earliest period of PrGmc, if not earlier, so that */a:/ merged with */o:/ and the diphthong */ei/ monophthongized to */i:/. */a:/ was rare in IE, but the above shift is the source of OE *brōþor* ‘brother’, *mōdor* ‘mother’, *stōd* ‘stood’, cf. Lat *frāter*, *māter*, *stāre*. */ei/ was common, however, and its monophthongization is well represented, as in the present forms of strong class I verbs, such as *rīdan* ‘ride’, cf. the spelling (ei) in Goth to represent /i:/, for example, *reidan*. These developments produce the long vowel system:

i:	u:
e:	o:
æ:	

3.4 The major phonological shift in PrGmc, however, concerns accent. It is generally thought that in late IE accent was primarily determined by pitch. Pitch accent was variable, that is to say, it could occur on any syllable in the word as determined either lexically or morphologically. However, PrGmc developed a new system of stress accentuation which was governed by the principles outlined in §§2.84–91 for OE. This had the important consequence that henceforth, in contrast to the system operating under pitch accentuation, Gmc and its daughter languages began to treat vowels in stressed and unstressed syllables differently. The following sections deal only with vowels of stressed syllables; for the vowels of unstressed syllables see §§3.27–34.

II Vowel harmony

3.5 In all the Gmc languages, although to a lesser extent in OE than others (and to a greater extent in OHG than others), there is a clear tendency to harmonize the short vowels */i, u, e/ to a following vowel, so that */i, u/ lower before a nonhigh vowel and */e/ raises before a high vowel. However, if the short vowel is followed by */n/ + consonant or */m/ alone the harmonic process is inhibited and */e/ is raised to */i/. Clearly these developments before */n, m/ are simply a matter of raising before nasals, whereby all nonlow short vowels become [+high]. However, see Prokosch (1939: 113) for a contrary view.

3.6 **e/* regularly harmonizes to **i/* before **i/* or its consonantal counterpart **j/* in all the Gmc languages. The most obvious relevant OE examples are in the 2,3sg.pr.ind. of strong verbs of classes III–V, hence *hilpst, hilpþ, stilst, stilþ, spricst, spricþ* from *helpan* ‘help’, *stelan* ‘steal’, *sprecan* ‘speak’. Parallel to these is the present tense of the so-called weak presents of class V, *biddan* ‘ask’ < **bidjan*, *sittan* ‘sit’, *licgan* ‘lie’, *fričgan* ‘ask’, *þicgan* ‘partake’. Other varied types of example include: *midd* ‘middle’, cf. Lat *medius*, *riġnan* ‘rain’, cf. *reġn*, *wine* ‘friend’, cf. Lat *venia*. A consequence of this change is that in OE */e/* cannot except by analogy stand before */i, j/* at the time of *i*-umlaut and there are therefore no definite examples of the *i*-umlaut of **e/* in OE, although the results of the two processes would be identical for OE, see §5.81 for discussion.

3.7 An integral part of the change **e/ > *i/* is that the Gmc diphthong **/eu/* shifts to **/iu/* in the same circumstances, for example, **biudis, *biudiþ*, etc. < **beodan* ‘ask’. Unlike the forms of §3.6, however, these then may be subject to *i*-umlaut in WS, giving *býtst, býtþ*, etc., see further §5.83.

3.8 The parallel shift of **e/ > *i/* before **u/* is frequent in OHG and OSax, but is generally absent in OE and OFris, for example, OHG, OSax *filu* ‘many’, cf. OE *fela*, OHG *mitu, metu* ‘mead’, cf. OE *medu*. The only good OE example of the shift is *cwudu* ‘cud’ < **cwidu* < **cwedu* by Combinative Back Umlaut of */i/*, cf. EpGl 655 *-quidu* and see §5.109. If this is a genuine example the change may have been encouraged by the preceding **w/*, see Ross (1954: 95–6).

3.9 Except before nasals, see §3.5, **i/ > *e/* before non high vowels quite frequently in OFris, OSax, but the change is only attested in OE by *nest* ‘nest’, cf. Lat *nīdus*, *wer* ‘man’, cf. Lat *vir*, and Ch 1195.5 *spečes*, gen.sg. of usual *spič* ‘bacon’. Note particularly that weak class 2 verbs such as *clipian* ‘call’ show no sign of the change, similarly *leofaþ* ‘he lives’ < *lifaþ*.

3.10 There is some variation in OE in the parallel lowering of **u/ > *o/* before non high vowels. Particularly in pa.parts. of strong verbs of classes II–IV the lowering is very regular, hence *coren* ‘chosen’, *holpen* ‘helped’, *stolen* ‘stolen’, and there are other words also where */o/* is regular, such as *dohtor* ‘daughter’, *god* ‘god’, *gold* ‘gold’,¹ even perhaps when the following vowel is **/o: / > OE /u/*, hence *nosu* ‘nose’ < **nusō*.² But in many other cases no lowering occurs in OE even when the lowering is found elsewhere, especially in OHG. Typical examples are: *bucca* ‘buck’, *fugol* ‘bird’, *full* ‘full’, *ufan* ‘from above’, *wulf* ‘wolf’, against OHG *boch*, etc. A third group of words show variation in forms, such as *cnocian ~ cnucian* ‘knock’, *spora*

~ *spura* ‘spur’, *spornan* ~ *spurnan* ‘spurn’. In all these cases, however, forms with /u/ are in an obvious majority.³

¹ But in *geoc* ‘yoke’, alongside *iuc*, ⟨eo⟩ indicates palatal diphthongization of */u/, see §5.60.

² If this is the origin of *nosu*. The parallel form *duru* suggests **duruz*, where lowering would not take place. See further Campbell (1959: §612).

³ It is not necessary to suppose that the later lowering of proto-OE */eu/ > /eo/ is relevant here, nor that similar lowerings, such as OSax *breost* ‘breast’ against *treuwa* ‘troth’, where /w/ prevents lowering, are relevant. These shifts belong more properly to the histories of the individual languages. For early OE examples indicating /eu/ see §2.33.

3.11 As stated in §3.5, the presence of a following */m/ or /n/ + consonant should inhibit the lowering of */i, u/ described in §§3.9–10. In effect, however, examples are restricted to retention of */u/, see however §§3.13–14, where it is most regularly seen in the pa.parts. of strong verbs of class III, such as *swummen* ‘swum’, *bunden* ‘bound’, *sprungen* ‘sprung’, cf. *holpen*, and in the class IV verb *numen* ‘taken’, cf. *stolen*. Other more isolated examples include forms such as *cuman* ‘come’, *hund* ‘hundred’, *fruma* ‘beginning’, *guma* ‘man’ and other masc. *n*-stems of the same structure. The same retention of */u/ before */n/ standing alone is found quite often in OE, for example, *huniġ* ‘honey’ (< **hunag-*), *þunor* ‘thunder’, *wunaþ* ‘he dwells’, and there is also variation in the other WGmc languages.

3.12 When */e/ was followed by */m/ or /n/ + consonant, then, as stated in §3.5, it was regularly raised to */i/ in Gmc. The change is most regularly seen in the present forms of strong verbs of class III, such as *swimman* ‘swim’, *bindan* ‘bind’, cf. *helpan* ‘help’, and the class IV *niman* ‘take’ also belongs here. Typical of the development outside the strong class system is *wind* ‘wind’, cf. Lat *ventus*. The change is often obscured by later developments involving loss of the nasal, such as *fif* ‘five’, cf. Goth *fimf*, Grk *pente*, for further examples see §§3.13–14.¹

¹ Unlike the situation described in §3.11, here single */n/ does not cause raising, hence *cwene* ‘woman’, and parallel forms in other Gmc languages. For *wine*, etc. see §3.6.

III Loss of nasals and compensatory lengthening

3.13 Early in the PrGmc period a nasal was lost between a vowel and a voiceless velar fricative, with nasalization and compensatory lengthening of the vowel, so that the sequences */iŋx, uŋx, aŋx/ developed as */i:ŋ, ū:ŋ, ā:ŋ/. It seems reasonable to suppose that this development happened at much the same time as the processes of vowel harmony discussed in §§3.5–12, for this explains the failure of */e, o/ to appear in these contexts.

Under those circumstances the high vowels may be assumed eventually to lose their nasalization and develop in parallel to other long vowels. Thus we find OE *þēon* ‘thrive’ < *þīon* < **þīxan* < **þinxan*, cf. Goth *-þeihan*, OSax *thīhan*, *þūhte*, pret. of *þyncān* ‘seem’, *fūht* ‘moisture’, *ūhte* ‘dawn’. In the case of */aŋx/ the lengthening to */āx/ was sufficiently late to prevent its merger with IE */a:/ which shifted throughout Gmc to /o:/. See §3.3, for it appears as /a:/ in Goth, NGmc, OHG, and OSax. In OE and OFris, however, the nasalization is retained, and there is a late Anglo-Frisian rounding to /o:/. Further details and discussion are to be found in §§3.22, but typical examples include *þōhte* ‘he thought’ < **þanxte*, cf. *þencān* ‘think’, *hōn* ‘hang’ < **hanxan*, cf. *hangan* ‘hung’.

3.14 In OE, OFris, and OSax only, and hence to be placed at a much later date than the change discussed in §3.13, the PrGmc loss of nasal between a vowel and a voiceless velar fricative, with compensatory lengthening of the vowel, was generalized to all fricatives, so that nasals were then lost in the groups */mf, nθ, ns/. In other respects the change was identical, so that */i, u/ were simply lengthened to /i:, u:/, whilst, at least in Anglo-Frisian,¹ */a/ when lengthened and nasalized was rounded to /o:/. Typical examples of the lengthening of */i, u/ are: *fif* ‘five’, cf. Got *fimf*, *fifel* ‘monster’, *liþe* ‘gentle’, cf. OHG *lindi*, *sīþ* ‘journey’, cf. Got *sinþs*, *gūþ* ‘war’, cf. OHG *gund-*, *mūþ* ‘mouth’, cf. OHG *mund*, *ūþ-* prefix, cf. Got *unþa-*, *dūst* ‘dust’, cf. OHG *tunst*, *ūs* ‘us’, cf. OHG *uns*. Typical examples of the lengthening and shift of */a/ are: *sōfte* ‘soft’, *ōþer* ‘other’, *sōþ* ‘true’, *tōþ* ‘tooth’, *gōs* ‘goose’, but see §3.22 for further discussion and details.²

¹ Occasional forms with /o:/ are also found in OSax.

² Also to be taken here is the runic name and name prefix *ōs-*. See also van Loey (1970: §29) for discussion of this element in Dutch place-names and evidence of both lengthening outside OE, OFris, OSax and rounding outside Anglo-Frisian.

3.15 The changes described in §§3.13–14 may be approximately characterized as follows, where the restriction to [+back] fricatives which applies in PrGmc is lost with the generalization of the change in WGmc:

$$V \left[\begin{array}{c} +\text{cons} \\ +\text{nas} \end{array} \right] > \left[\begin{array}{c} V \\ +\text{long} \end{array} \right] \emptyset / \text{————} \left[\begin{array}{c} +\text{cons} \\ +\text{cont} \\ +\text{back} \end{array} \right]$$

IV Diphthongization

3.16 One clear characteristic of the WGmc dialects is that diphthongs were frequently developed, either in the context of a following geminate

approximant, or due to resolution of hiatus forms. In all cases this diphthongization is manifested by the vocalization of an approximant. In the cases of a following geminate consonant the source may either be the PrGmc geminates */jj/, ww/ or the WGmc geminate */ww/. The source of the former geminates is obscure, see further §4.2, whilst the source of the latter is West Germanic gemination, see §4.11. There are several sources of hiatus, discussed in §3.19.

3.17 In PrGmc the approximants */j/, w/ were geminated after a short vowel to */jj/, ww/, and then in WGmc there was vocalization to */ij/, uw/.¹ Thus the sequences */ijj/, ajj, iww, eww, aww/ developed into diphthong + approximant or, in the case of */ijj/, long vowel + approximant sequences, giving WGmc */i:ij/, ajj, iuw, euw, auw/. These sequences then develop normally into PrOE as */i:ij/, ai:j,² iow,³ eow, æaw/, see §§5.7–9, 41.⁴ Typical examples of these changes are: *frijjō > Frīge(-dæg) ‘Friday’, *klajj- > clæg ‘clay’, *triwwi > trýwe ‘true’, *brewwan > brēowan ‘brew’, *glawwa > glēaw ‘wise’.

¹ In NGmc the development was to *ggj*, *ggw*, in Gothic to *ddj*, *ggw* by Holtzmann’s Law. For a discussion and summary of the many problems surrounding this change see Prokosch (1939: 92–3), Collinge (1985: 93–101).

² But after monophthongization of */aij/ > */a:i/ *i*-umlaut operates normally with fronting of */a:/ due to the immediately following */j/, and consequently the later development is to /æ:i/. Of course the */j/ here belongs to the following syllable, see §5.86 and Colman (1986).

³ In this case the new diphthong must be followed by */i/, see §3.7, and hence it is later subject to *i*-umlaut, for details of which see §5.83.

⁴ In these positions /w/ would regularly be lost in such positions through apocope, but it is frequently analogically restored, see §§7.72–3.

3.18 By WGmc gemination, see §§4.11–14, */w/ would be lengthened to */ww/ if followed directly by */j/, and hence the sequences */iwwj/, awwj/ would arise. Diphthongization to */iuwj/, auwj/ then followed and the further developments of the diphthong, with later *i*-umlaut due to the following */j/, are as expected in OE, giving WS *īo > *īe > ī, ŷ, nWS īo; WS ēa > *īe > ī, ŷ, nWS ēa > ē. Additionally, however, one of the two remaining intervocalic approximants is then lost, the usual situation being that */j/ is lost after the high diphthong, */w/ after the low diphthong.¹ Hence we find: *niwwja- > *niuwja- > *niēwja- > nīwe, nWS nīowe ‘new’, *hawwj- > *hauwj- > *hēawj- > *hīewj- > hīg ‘hay’, nWS hēg. Other examples parallel to nīwe (nīowe) are: glūw ‘form’,² hūw ‘form’, hlŷwan ‘warm’;³ examples parallel to hīg (hēg) are: cīgan ‘call’, frīgea ‘lord’, īg ‘island’, Sea 97 strēgan ‘strew’, trīg ‘tray’.

¹ The phonology of the change is obscure, although it clearly has parallels with syncope. The loss of */j/ at least, and hence presumably of */w/, cannot be earlier than

i-umlaut, and one consequence of this is that it is difficult to determine the synchronic distinction which causes */j/ to be lost from original */iwwj/ sequences, */w/ to be lost from original */awwj/ sequences. In this context *īwan*, nWS *ēwan* ‘show’ with loss of */j/ rather than expected loss of */w/ is perhaps unsurprising.

² For *glīg* see §4.9(2).

³ Poetical *spīowede*, *spēowede* ‘spat’ are usually assumed to be analogical on **spīowan* (< **spiwwjan*). Jul 476 *spiowedan* with a short diphthong may be originally from **spiwid-* with transfer to class 2 as **spiwod* and then back umlaut. Various forms of **siōwan* ‘sew’, such as CorpGl 1773 *siouu* ‘I sew’, are equally due to one of the above developments, dependent upon the length of the diphthong, which is uncertain.

3.19 During the period when the WGmc languages still formed a unity, there occurred a process which was to be repeated during the OE period, see §§5.131ff. for details. This was that, when two vowels stood in hiatus and that sequence represented a sequence which corresponded to an existing diphthongal template, the second vowel desyllabified and formed a diphthong with the preceding vowel. In WGmc this process of hiatus resolution by means of diphthongization was restricted to sequences of short vowel + */u/. These sequences could arise in three ways: (1) loss of */w/ before */u/; (2) vocalization of */w/ when word-final; (3) shortening and raising of unstressed */o:/ > /u/, see §3.34. The developments of these hiatus sequences are discussed in turn below.

- (1) In WGmc */w/ was lost before */u/ (usually < */o:/, see §3.34) so that */ewu, awu/ > */eu, au/. These diphthongs then develop normally in OE, see §5.41. Thus we find in the *wō*-declension OE *clēa* ‘claw’ < */klæu/ < */klau/ < */kla-u/ < */klawu/ < */klawol/, similarly *prēa* ‘affliction’. Nom.acc.pl. *fēa* ‘few’, alongside *fēawe*, *fēawa*, is from neut.pl. */fauwo:/, cf. *gearu* ‘ready’ nom.acc.pl.neut., and similarly *frēa* ‘lord’ is from inflected forms, such as */frawun/. Amongst neut. *wa*-stems we find the plural forms *cnēo* ‘knees’, *trēo* ‘trees’ < */knewo:/, etc.
- (2) Similar to the examples under (1) are those where a word-final vowel is lost in WGmc after */w/, causing the approximant to vocalize and then diphthongize with a preceding vowel, for example, */strawa/ > */strau/ > OE *strēa* ‘straw’, */cnewa/ > */cneu/ > OE *cnēo* ‘knee’. Further typical examples include: */hrēa/ ‘raw’, *trēo* ‘tree’, *pēo* ‘servant’. In many cases *w* is analogically restored in OE, although the status of such restoration is obscure, see further §§7.72–3, giving more usual *strēaw*, *hrēaw*.
- (3) A number of forms developed hiatus sequences which could lead to diphthongization merely by the shortening of unstressed */o:/ > */u/, hence */θrio:/ > */θriu/ > OE *þrīo* ‘three’ neut.pl. In *hīo* ‘she’, and the fem. demonstratives *sīo*, *þīos* the fem. inflexional *-u* has been added to stem-final *-i*. Further diphthongization is seen in *fīond* ‘enemy’, *frīo* ‘free’, *frīond* ‘friend’, *blīo* ‘colour’, where */u/ is due to */u/ in the final syllable of accusative forms, cf. §3.10, and see Ritter (1909).

V Influence of */z/

3.20 Where in WGmc */i, u/ would normally remain, that is, most frequently before a following high vowel, see §§3.9–10, these vowels in the development of OE are nevertheless lowered before an immediately following */z/ (which at a later point is rhotacized to /r/, see §§4.15–16, also, for the chronology, Luick (1914–40: §107A2)). The change is most obviously seen in various pronominal forms., such as *we*, *me*, *ge*, *he*, *þe*, cf. Goth *weis*, OHG *wir*, etc.¹ Other examples include the prefixes *or-*, *tor-*, cf. Goth *uz-*, *tuz*, OHG *ur-*, *zur-*, and *meord* ‘reward’ (< **merd* by breaking), cf. Goth *mizdo*.² See further Sievers (1900: 23ff.), Campbell (1939: 82–3).

¹ Presumably the change occurs in weak forms of the pronouns, which may then be lengthened (> *wē*, etc.) under stress.

² *Leornian* ‘learn’ with both *liornia* and *leornia* in Nbr can only be placed here with some uncertainty. The verb shows traces of being originally of weak class 3 in OE, and the variation of vowel in Nbr at first sight suggests a late WGmc or proto-OE variation between */i/ and */e/ due to variation of the formative element between */j/ and */æ:/, which is supported by OFris *lirnia*, *lernia*. On the other hand, the breaking diphthong in these forms must be from */e/, since breaking before /r/ + consonant fails in the context of following /i,j/, see §5.24n5.

3.21 A development before the sequences */zdi, zdj/ which is difficult to understand in the context of §3.20 would appear to account for *reord* ‘food’, *reord* ‘voice’, *gereord(e)* ‘voice’, *heordan* ‘hards of flax’.¹ These words must have had the stem vowel */a/ in Gmc, cf. Got *razda* ‘voice’, and the stem vowel has developed to /e/ in this particular sequence, with later breaking and then *i*-umlaut, since *-io-* is normal in Nbr, see Campbell (1959: §124n4) for details.² But any explanation of this development remains to be found.

¹ Note also *briorde* ‘point’ dat.sg. (Li 1×, Ru2 2×) against MkGl(Li) 13.27 *breard*.

² The ME form *rearde* ‘voice’ (Azenbyte of Inwit) suggests a development from **rærde* but this is equally difficult in the absence of the expected *i*-umlaut, and therefore it cannot be entirely relied upon. Note, however, *breard* in n1 above. Perhaps such forms were variant *ō*-stems rather than *jō*-stems.

VI Long vowels

3.22 The long vowel system which developed in PrGmc and is described in §3.3 was generally well preserved in the Gmc dialects leading to OE. One major exception to this, however, concerns the development of the low long vowel indicated in §3.3 as */æ:/. As will be observed, */æ:/. is the only low long vowel and there is no front/back contrast in operation. From

the structural point of view, therefore, the vowel as it develops in WGmc may be considered to be neutral in this last respect, that is, */a:/. Confirmation of this comes from Latin loan-words, such as *strāta* ‘street’, where the Latin vowel is interpreted as Gmc */a:/, see §3.23. In many WGmc languages the consequent development is entirely expected, with /a:/. throughout, for example, OHG *tāt* ‘deed’, *māno* ‘moon’. In OE and OFris, however, the situation is somewhat different, for there */a:/. develops as either /æ:/. or /e:/. except immediately before a nasal, when the development is eventually to /o:/.¹ Typical examples are: OE *dǣd*, *dēd*, OFris *dēd* ‘deed’, OE, OFris *mōna*. The development before nasals no doubt indicates a merger with the types represented in OE by *þōhte* ‘thought’, *tōþ* ‘tooth’, discussed in §§3.13–14. Confirmation that the development of */a:/. > /o:/. must have been through a stage *[ɑ:] is given by an OE form such as *samcucu* ‘half-dead’, which was subject to early shortening. Since the result is /a/, the shortening must have been from *[ɑ:] rather than /o:/.

¹ Additionally, the development to /a:/. before /w/ in WS forms of the type *sāwon* ‘they saw’ should be noted, see §5.21. But the restriction of such forms to WS demonstrates that in proto-OE the vowel must have been */æ:/. with later raising in Angl to /e:/. see §3.25.

3.23 A natural starting-point for the discussion of these forms is the isomorphism between the development of */a:/. > /æ:/. e:/. and the special development of */a:/. > /o:/. before a nasal. In Gmc dialects where there is no rounding and retraction of the nasalized vowel there is also no development of a clearly front vowel phoneme elsewhere. It is reasonable to suppose, therefore, that with nasalisation there develops a retracted variant of */a:/. which eventually causes a structural contrast in terms of backness between the unnasalized and nasalized vowels. This contrast is at a later stage reinforced by the monophthongization of the Gmc diphthong */ai/. > */ɑ:/. in OE, see §§5.7–9.¹ Since in the Gmc dialects underlying OE there was originally only one low short vowel and one low long vowel, which may therefore be phonemicized as /a, a:/. the above developments cannot be further explained phonemically. Rather, it must be assumed that the low long vowel had always remained phonetically front, that is, approximately [æ:], whilst the short vowel was further back, although the degree of backness cannot be ascertained. It therefore follows that the alleged OE, OFris shift of */a:/. > /æ:/. is an artefact of phonemic theory, and that there is no reason to suppose that, except before nasals, the Gmc long low vowel retracted significantly at any period in the development of OE.²

¹ In OFris, however, the monophthongization of */ai/. is to /æ:/. see §5.9.

² There has been much discussion of the Gmc development of */æ:/. (< IE */e:/.). Whilst most writers, such as Bülbring (1902: §96), Luick (1914–40: §§115–18), Girvan (1931:

§§34–5), Campbell (1959: §129 and n1), argue that there was a shift in Gmc to **ā* with later fronting in OE and OFris to *ǣ*, *ē*, the minority view that **ǣ* remained (with later raising to *ē* in OFris and some OE) is expressed in J. Wright and Wright (1925: §119). For further discussion see Campbell (1947) and references therein. It should be pointed out that the account presented here is essentially neutral between these views, since it accepts a phonemic shift to */a:/ but a phonetic retention of *[æ:].

3.24 From the above it may be inferred that phonetically Gmc *[æ:] retained approximately that pronunciation throughout the period. In OE this pronunciation was then equally retained in S dialects, that is, WS and Kt, hence *dǣd* ‘deed’, *hǣr* ‘hair’, *mǣg* ‘kinsman’, *þǣr* ‘there’, etc., and also the pa.pl. of strong verbs of classes IV and V, such as *bǣron* ‘they bore’, *stǣlon* ‘they stole’, *sǣton* ‘they sat’, *wǣron* ‘they were’.¹

¹ It is often stated that Kt has /e:/ for Gmc */æ:/. Although this is true in terms of the data, it is most probable that the original forms were */æ:/. and that the development to /e:/ is to be interpreted as part of the rather later Kt *æ*-raising, see §§5.189–91, also Crowley (1986: 105–8).

3.25 In both OFris and N. (that is, Angl) dialects of OE, however, there occurred at some stage a raising of */æ: / > /e:/. Thus in Angl we find *dēd*, *hēr*, *mēg*, *þēr*, *bēron*, etc.¹ The relative dating of this raising is unclear, and especially it is uncertain whether this was a development shared between OFris and Anglian in the pre-settlement period, that is, the period of Anglo-Frisian unity, or was a later independent development in the separate languages.^{2,3}

¹ In WS *ǣ* occurs without significant exceptions, although note poet, *mēce* ‘sword’ which occurs throughout. On the other hand the compound *mēcefisc* ‘swordfish’ occurs with both *ē* and *ǣ*. Clearly *mēce* has special status. In Angl there are a few forms with ⟨*ǣ*⟩ in early Nbr texts, such as LRid 12 *gīwǣde* ‘dress’, RuneAuzon *þǣr* ‘there’, CorpGl 1852 *sprǣc*, but these are probably due to confusion with ⟨*ē*⟩ under influence from contemporary Lat, see also Lindelöf (1901: §26). The only frequent examples of ⟨*ǣ*⟩ for ⟨*ē*⟩ are in Ru1, where they occur approximately in the proportion 7:10 (Campbell, 1959: §129n1). Doubtless this is merely one sign of WS influence on the scribe of this text.

² DeCamp (1958) argues that the development in OE is to be dated to the sixth or seventh centuries, but under Frisian influence, cf. Samuels (1971).

³ OE *swǣ*, *swǣ*, *swā* ‘so’ causes some difficulties. The predominant forms are EWS *swǎ*, *swǣ*, LWS *swā*, eNbr, Ps(A) *swě*, INbr *swǣ*. The earlier forms appear to be, therefore, WS *swǣ*, Angl *swě*, the later forms WS *swǎ*, Angl *swǣ*. Whilst the earlier forms suggest a direct development from Gmc *[æ:] with shortening when unstressed, the later forms cannot be so derived. It is more probable that when long they have been redeveloped from weak forms, with WS *swā* being developed from weak *swa* which in turn is due to the special retraction of /æ/ in non-lexical items, see §6.4 and n1. In contrast to this variety of forms only *hwā* ‘who’ exists in OE. Although it would be possible to equate *swě*, *swǣ* with Goth *swe* in order to account for the contrast, it is far more probable that we have to do with variable selection of weak v. strong forms.

3.26 A further, but quite separate, development of the Gmc long vowels appears to be evidenced in the OE monosyllables *bū* ‘both’, *hū* ‘how’ (also OFris, OSax), *tū* ‘two’. All forms are from Gmc */o:/ and in the case of the last two are from **hwō*, **twō*, which suggests that the raising of */o:/ > /u:/ takes place in such monosyllables after */w/. *Bū* may then be explained transparently on the analogy of *tū*. The same explanation, however, cannot be the source of *cū* ‘cow’, which may have its source in allomorphic variation between */o:/ and */u:/ in IE, note here that /k/ < IE */g^w/ and cf. OFris *kū*, ON *kýr*, see also Brunner (1965: §69A) and references, Campbell (1939: 83).¹

¹ Naturally, if the conditioning environment includes preceding */w/, *tō* ‘to’ never shows signs of the change.

VII Unstressed vowels

3.27 In PrGmc the system of pitch accentuation outlined in §3.4 had the consequence that the same series of vowels and diphthongs occurred in unaccented as in accented syllables, the only exception being that Gmc */e:/, which was an innovation in Gmc, occurred only in accented syllables.¹ The shift to stress accentuation, however, meant that there began during the Gmc period a series of shifts which can be generalized as a set of reductions in vowel length, so that, for example, short vowels were lost and long vowels were shortened. This process continued during the OE period, see §6.13. In the following paragraphs we deal firstly with loss of short vowels, secondly with shortening of long vowels, and finally with monophthongization of diphthongs. In this context it is important to note that all IE final consonants were lost at an early stage in PrGmc with the exceptions of */s/ (including the allophone *[z]) and */r/ and that a following nasal was probably lost via the route of nasalization of the preceding vowel. For details of such consonantal changes see §4.10.

¹ Hence it follows that if we assume the system in §3.2 the short vowels in unstressed syllables were */i, e, a, u/. Note particularly that */a/ is from IE */a, o, ə/. It is unclear when this merger took place with respect to the various losses described in §3.28, for no distinction in result ensues.

3.28 After the loss of final IE consonants (see §3.27), the mid and low short vowels */e, a/ were lost in absolute finality, for example, OE *ber* ‘bear!’, cf. Lat *fer* < **fere*, *wāt* ‘he knows’, cf. Grk *οἶδα*, *οἶδε*, *wulfes* ‘wolf’ gen.sg. < **wulfæs* < **wulfas* < **wulfasa* < **wulfoso* (see §3.27n1) and all other examples of the gen.sg. of *a*-stems, see further §3.31n1.

3.29 The high short vowels */i, u/ were more resistant to change, in that loss only occurred after two or more syllables. Examples of trisyllabic loss of */i/ are the more common, hence gen.dat.sg. of weak nouns: *guman* < **gumaniz*,¹ **gumani*; dat.pl. -um < **-umiz*; 2,3sg.,3pl.pr.ind.: Angl *rīdes* < **rīdisi*, *rīdeþ* < **rīdīþi*,² *rīdaþ* < **rīdanþi*. A typical example of trisyllabic loss of */u/ is the acc.sg. of masc. weak nouns and other disyllabic consonantal stems: *guman* < **gumanū* (< **gumanum*, see §3.27), *brōþor* < **brōþurū* < **brōþurum*.³

¹ Trisyllabic loss of a high vowel in absolute finality was no doubt roughly contemporaneous with the losses described in §3.28, whilst the losses before */z/ were probably contemporaneous with the changes described in §3.31, which should be consulted.

² But for these forms see further §3.30.

³ A number of exceptions to trisyllabic loss are evidenced, notably Angl *milc* ‘milk’, generalized from gen.dat.sg. **milukiz*, **miluki* > **milyc* by *i*-umlaut and palatalization and hence *milc*, cf. WS *meolc* showing trisyllabic loss. Similarly *ealu* would appear to be the result of equation of the initial vowel with gen.sg. **æleþ* < **aluþiz* with iterative *i*-umlaut, giving nom.sg. **ælu* which would then be subject to *u*-umlaut, see Weyhe (1906: 78). Although the process of second fronting appears irrelevant, influence from Merc cannot be entirely ruled out, given the forms *meolc*, *milc* above.

3.30 Where unstressed */e/ remained, it was then either preserved or lowered to */æ/ before */r/, for example, *æfter* ‘after’, *hwæþer* ‘which of two’, *fæder* ‘father’, cf. RuneAuzon *gibrōþær* and see Stiles (1988b: 339), also §6.49. In all other contexts, however, it was raised to */i/, for example, **fōtez* > **fōtiz* > OE *fēt* ‘feet’ with *i*-umlaut followed by apocope of */i/ in OE, **hnutiz* > OE *hnyte* ‘nut’ gen.sg., **rīdes* > **rīdis* > Angl *rīdes*. This raising occurs even before */a/, for example, *lýtēl* ‘little’ < **lūtilaz* with *i*-umlaut, cf. here the failure of stressed */e/ to raise in the same environment, §§3.5–9.

3.31 At a later period during the development of WGmc, final *[z] which had been retained during the loss of PrGmc final consonants, see §§3.27, 4.10, became subject to loss finally, typical examples being nom.sg. of *a*-stems **-az* > **-a*, nom.pl. of athematic stems **-iz* > **-i*, and, exceptionally, the type **milukiz* > **miluki* referred to in §3.29n3.¹ One consequence of this loss of final *[z] was that **-a* once more occurred in absolute finality, and then the change discussed in §3.28 was repeated with respect to **-a*, giving developments such as **stainaz* > **staina* > **stain* > OE *stān* ‘stone’. Where **-a* was preceded by a consonantal cluster ending in either a resonant or an approximant, then resyllabification took place, with the development of either a syllabic resonant, such as **fingra* > *fingr* ‘finger’ (see further §§6.38–40), or vocalization of the approximant, such as **barwa* > **baru* > *bearu* ‘grove’,² **herja* > **heri* > *here* ‘army’.³ The loss does not occur in other positions; note especially that it does not occur with **-a*- as

the connecting element of compounds, hence **dagalik* with syncope of the vowel (> *dæglic* ‘daily’) only occurring in OE, see §6.15.

¹ It seems probable that **[s]* was often retained finally in the antecedent of OE and the other North Sea Germanic languages, hence OE nom.pl. of *a*-stems *-as*, for example, *stānas* ‘stones’, 2sg.pr.ind., for example, *rīdes* ‘thou ridest’. This would then be the explanation for the retention of **-a* in the gen.sg. of *a*-stems, for example, *stānes* < **stānas*, see §3.28. See also Brunner (1965: §234A4).

² The diphthong in the stem is from inflected forms such as *bearwas* ‘groves’.

³ Such forms are more common than sometimes appears to be suggested.

3.32 In general the Gmc long vowels in unaccented syllables were merely shortened without further direct shift, hence **-ī* > **-i*, for example, **rīdī* > **ridi* > *ride* ‘ride’ pa.subj.sg., **andīaz* > **andī* > **andi* > OE *ende* ‘end’ by *i*-umlaut, and **-ē* > *-æ* (later *-e*), for example, *fremede* ‘performed’ < **fremidæ* < **framidæ* < **framidē*. In the case of **-ō* when shortened, this usually developed as **-u* in N and WGmc, the nearest equivalent short vowel, for example, 1sg.pr.ind. as **rīdō* > Angl *riđu* (often *rīdo* with OE lowering, see §§6.55–8), nom.sg. of *ō*-stems as **lufō* > *lufu* ‘love’ and other similar forms. However, in the context of a following nasal, lowering to **/a/* (presumably originally **[ā]*) occurred, hence acc.sg. of *ō*-stems, such as **lufōm* > **lufa* > OE *lufe*, and nom.sg. of fem. *n*-stems, such as **tungōn* > OE *tunge* ‘tongue’. Trimoric long vowels in unaccented positions were merely shortened to bimoric long vowels, hence nom.sg. of masc. weak nouns such as **gumōo* > **gumō* with later development in OE to *guma*, see §§6.27–8.

3.33 The Gmc diphthongs **/ai, au/* when occurring in unstressed syllables monophthongized to **/a:, o:/*, and **/a:z/* subsequently developed as OE */æ:z/*, see §§3.22–4 for discussion. For exemplification of this change see §6.27(4).

VIII Raising of back vowels

3.34 By a process not dissimilar to those discussed in §§3.5ff. PrGmc unstressed **/o(:)/* was raised to **/u(:)/* in certain circumstances. These were that the mid vowel should be followed by either **/u/* in the following syllable or directly by the labial nasal **/m/*. Since, see §3.27n1, IE **/o/* had usually developed to **/a/*, it must be assumed that even in PrGmc such environments prevented lowering and that **[o]* persisted there as an allophone of **/a/*. The actual raising, however, does not occur in Gothic and must be later than the merger referred to in §3.27n1. Examples of the raising of **[o]* are: (1) with following **/m/*: dat.sg. of *a*-stems, for example,

**stainomiz* > **stainum* > *stānum*, cf. Goth *stainam*; (2) with */u/ in the next syllable: acc.sg.,pl. of masc. *n*-stems, for example, **gumonu* > **gumunu* > **gumun* (where *guman* is introduced from other parts of the declension), and similarly for disyllabic consonant stems, such as **brōþoru* > **brōþuru* > OE **brōþur* with lowering to *brōþor*, and so for pl. **brōþoruns*. Examples of the raising of */u:/ are: (1) with following */m/: dat.pl. of *ō*-stems and similarly fem. *n*-stems, such as **lufōm*, **tungōm* > OE *lufum*, *tungum*; (2) with */u/ in the next syllable: acc.sg.,pl. of fem. *n*-stems, such as **tungōnu* > **tungūn* where influence of other forms gives OE *tungan*, but cf. CædH 9 *foldu*, nouns in *-*ōþuz* < IE -*ātus*, such as **fiskōþuz* > **fiskūþuz* > OE *fiscop* ‘fishing’. Note particularly here that the preterite of weak class 2 verbs varied because of variation in inflexion such as 3sg. *-*æþ*, 3pl. *-*unþ*. Consequently the development of the thematic *-*ō*- should have been to *-*ū*- where */u/ followed but otherwise remaining as *-*ō*-. In OE shortening and later lowering of /u/ would normally give /o/ in the first instance, whilst *-*ō*- would shorten as elsewhere to /a/, see §6.28. The two developments compete with one other, although the former is dominant in WS, for example, *lufode* ‘loved’, whilst the latter is usual in other dialects, for example, *lufade*. But elimination of the predicted allomorphy is regular in all dialects. The same phenomenon affects superlative forms, where *-*ōst* > *-*ūst* in inflected forms such as dat.pl. *-*ōstumiz* > *-*ūstumiz*, and this leads to the OE variation -*ost*, -*ast*. The former is more widespread, but reduction is more frequent still, giving -*est*, see §6.64.

The consonants in Germanic

I Primitive Germanic

4.1 It is not possible within the scope of this work to give more than a brief outline of the development of consonants in Germanic prior to the period of Old English. Nor is any attempt made here to discuss the consonant system of Indo-European. Further, particular attention is paid only to those developments in later periods of Germanic which lead directly to the evolution of the OE consonant system. These remarks are particularly crucial in that the consonant system of Indo-European has been in recent years the subject of much debate and discussion. In particular the work of Gamkrelidze, Ivanov, and Hopper has prompted an altogether new consideration of the IE consonant system.¹ In what follows a rather conservative view of that system and its evolution into Gmc is taken, on pragmatic grounds only, and the debate over the structure of IE is viewed only from the sidelines. Thus a consonant system for IE of the type outlined in Lehmann (1952: 99) is assumed for present purposes.

¹ An excellent discussion of and bibliography to the controversy may be found in the relevant sections of Collinge (1985), to which should be added in particular Bomhard (1988) and the further items in the bibliography therein.

4.2 The PrGmc consonant system, whether derived by means of Grimm's Law or by some other route, see Collinge (1985: 63–70), may be reconstructed as follows, see also Moulton (1954, 1972), Normier (1977: 185–90), and cf. the table for proto-OE in §7.1:

	<i>Labial</i>	<i>Dental</i>	<i>Palatal</i>	<i>Velar</i> ¹
Voiceless stops	/p/	/t/	–	/k/
Voiceless fricatives	/f/	/θ/	–	/x/

	<i>Labial</i>	<i>Dental</i>	<i>Palatal</i>	<i>Velar</i> ¹
Voiced obstruents	/b ~ θ/	/d ~ ð/	–	/g ~ ɣ/
Sibilants	–	/s ~ z/	–	–
Nasals	/m/	/n/	–	–
Liquids, approximants	–	/l, r/	/j/	/w/

Geminate consonants also occurred, but on a much reduced scale compared with later stages of Gmc. Gemination is found medially of voiceless stops, liquids and nasals, and */s/, for example, OE *hoppian* ‘hop’, *cnotta* ‘knot’, *liccian* ‘lick’, *wulle* ‘wool’, *steorra* ‘star’, *swimman* ‘swim’, *rinnan* ‘run’, *wisse* ‘knew’. For the main source of OE geminate consonants see §4.11. Such geminates are usually of very early origin, but a subgroup of Gmc geminates appears to be of expressive origin, see generally Martinet (1937) and for geminates before the suffix *-ettan* Marckwardt (1942), also Hogg (1982a) for these and geminates in possibly hypocoristic forms, such as *docga* ‘dog’.

¹ The distinction between IE velars and labiovelars, for example, PrGmc */k/ v. */kʷ/ is not relevant for the later developments, and the latter are therefore treated here as sequences of consonant + */w/.

4.3 The major allophonic variation in PrGmc consonants which may be safely reconstructed occurs within the series of voiced obstruents, where we may postulate stop articulation *[b, d, g] in gemination and after a nasal, and also initially in the cases of *[b, d], with fricative articulation *[β, ð, ɣ] elsewhere. Hence we find the following stops in Gothic: (1) initially: *barn* ‘child’, *lamb* ‘lamb’; *dags* ‘day’; (2) after nasals: *bindan* ‘bind’; *briggan* ‘bring’ (<gg> = [ŋg]); and fricatives medially in: *arbi* ‘inheritance’; *fadar* ‘father’; *giban* ‘give’, *dags* ‘day’. Other allophonic variations include: (1) *[h] as the allophone of */x/ initially, for example, Goth *haban* ‘have’;¹ (2) *[ɣ] as the allophone of */n/ before velars, for example, *briggan* above; (3) *[z] occurred already in IE as the allophone of */s/ before */d/, for example, Goth *razda* ‘speech’. For further details, see Moulton (1972: esp. 170–3).

¹ But */x/ remained as a velar fricative medially, even when single, see §7.51.

II Verner’s Law

4.4 Whilst PrGmc still retained variable accentuation rather than the left-strong system of stress accentuation which later developed, see firstly §3.4, the Gmc voiceless fricatives became voiced in voiced surroundings when the preceding syllable was unaccented.¹ This shift, known as Verner’s Law after the publication of the discovery in Verner (1877), causes the voiceless fricatives to merge with the fricative allophones of the voiced obstruents, for example,

*[f, θ, x] > *[β, ð, ʁ], or, in the case of *[s], a shift to its voiced allophone *[z]. The change is most obviously observed in the pa.part. of all strong verbs and the non-singular (and 2sg.ind.) preterite forms of strong verbs of classes I–III. Typical examples of the variation from infin. and pa.part. forms would be: *dreifan- ~ *driþan-; *sneiðan- ~ *sniðan-; *teuxan- ~ *toȝan-; *keusan- ~ *kozan-. But the operation of Verner's Law can be seen in other words also, hence *faðēr 'father' < *fapēr, and many other individual forms.

¹ For an alternative view of the phenomenon, which sees the Gmc accent shift as an at least three-stage process with Verner's Law occurring before its completion, see Normier (1977). See also the discussion and bibliography in Collinge (1985: 203–16). The pre-Vernerian title of *grammatischer Wechsel* may still be encountered but is scarcely to be recommended.

4.5 The most obvious morphophonological feature of Verner's Law as it develops in OE is that the voiced fricatives (or their reflexes) are frequently extended to the non-singular preterite forms of strong verbs of classes V–VII.¹ Hence we find, for example, *cwædon* 'they said' (< *[ð]), *slōgon* 'they slew' (also with further extension to sg. *slōg*), *fengon* 'they took' (also sg.), cf. infins. *cweþan*, *slēan*, *fōn*, the latter two with OE lenition and loss of intervocalic */x/, see §7.45. Levelling away of Verner's Law can also be observed in OE strong verbs, especially those with medial /s/, such as *risen* pa.part. of *rīsan* 'rise', *genesen* pa.part. of *genesan* 'escape'. Note also strong class I *miþen* 'concealed', *wriþen* 'twisted'.

¹ Examples from class IV are naturally wanting, and this is of no significance for the analogical extension.

III Germanic approximants

4.6 In PrGmc, but perhaps after the time of the accent shift, when */j/ stood after either a heavy syllable or a light unstressed syllable and was preceded by a consonant, an epenthetic */i/ developed between the consonant and */j/. Hence forms due to this development, generally known as Sievers' Law (see Collinge, 1985: 159–74), are of the type **andjaz* > **andijaz* (> OE *ende* 'end' nom.sg.), **sōkje* > **sōkije* (> OE *sēc* 'seek!'), contrasting with **xarjaz* > *here* 'army', **biðje* > *bidde* 'wait!'. When the following vowel was lost in absolute finality, see §§3.27ff., the */ij/ was then treated in the same manner as in original trimoric sequences, see §3.32, no doubt because only one mora could be lost from a trimoric vocalic sequence.

4.7 At a very early period in the history of WGmc and certainly before gemination occurred, see §4.11, */j, w/ were lost when immediately preceding

their corresponding vowel, that is, */i, u/. This development is particularly important in the 2,3sg.pr.ind. of weak class 1 verbs, accounting for the type **framjīb* > **framīb* > OE *fremeþ* ‘he performs’ without gemination, cf. **framjō* > **framnju* (§3.32) > Angl *fremmo* with gemination. The change clearly takes place after the shortening and raising of */o/, since */w/ is lost in such positions, hence fem. *wō*-stems such as **sinwō* > **sinwu* > *sinu* ‘sinew’, for further examples see §3.19. The same change appears to take place in stressed syllables where */o:/ is raised to */u:/ by the preceding */w/, hence **twō* > *tū* ‘two’, see §3.26.

4.8 The same loss of */w/ occurs before */i/, hence **zarwiþ* > **zariþ* > *gyreþ* ‘he prepares’, cf. *gyrwan* inf., and other similar weak class 1 verbs. But in these cases the alternation between forms with /w/ and forms without is often analogically levelled, sometimes in favour of the one, for example, *hyrwan* ‘despise’, *nyrwan* ‘constrain’, sometimes the other, for example, *wylian* ‘roll’, and sometimes variably, for example, *gyrwan* ~ *gyrian*, *smyrwan* ~ *smyrian* ‘anoint’, *syrwan* ~ *syrian* ‘devise’. Individual words in which */w/ was lost before an */i/ which was later apocopated include *sā* ‘sea’ < **sāi* < **saiwi*, *ā* ‘law’, *hrā* ‘corpse’.

4.9 A variety of developments in WGmc all had similar results, namely an alternation in OE between /j/ and /w/. These are discussed below.

- (1) Normally the sequences */i:w, ijw/ developed in OE into the sequences /iow/, later /eow/, hence *brēowan* ‘brew’, etc., see §3.17. However, if a front vowel immediately followed that sequence, then */w/ was fronted to */j/, giving */i:j, ijj/. These then regularly emerge in OE as /i:j/, and hence forms such as */fri:jæsl > *frīges* ‘free’ gen.sg. alongside *frēo* < **frīja-*, **frīju*. But confusion often occurs and hence alongside *frīges* we find *frēos*, and conversely *frīgum* for *frēoum* dat.pl.
- (2) In *wa*-stem nouns where */w/ was preceded by */i:/, the */w/ would appear in absolute finality in the nom.sg. (also acc.sg.) after the loss of *-az, see §3.31, and the */w/ itself should soon be lost. This, however, would not arise in inflected forms where a vowel remained. Hence there should arise an alternation between stem-final /i:/ in uninflected forms and stem-final /i:w/ in inflected forms, for example, *Tī(ġ)*, **Tiowes* gen.sg. ‘the god Tiw’.¹ In early texts especially the nom.sg. form extends to other cases, such as *Tīges*, but generally the strong tendency is to reintroduce /w/ in the uninflected forms. This should give forms with the diphthong /io/, to which /w/ is usually added analogically, see §3.17n4, but /w/ may simply be added to forms with /i:/ only. Examples of the variation found as a result of these changes include: EpGl, ErfGl 767, CorpGl 1681 *briūg*, frequent *brīw* ‘brew’,

CorpGl 986 *gīg*, ClGl2 5 *gīw* ‘vulture’, EpGl, ErfGl 1015, CorpGl 2021 *slī*, ClGl1 4112 *slēow*, ClGl2 88 *slīw* ‘mullet’, ClGl1 3935–6 *Tīg*, ClGl1 4154 *Tuu* (?error for **Tīw*). The above alternations then influence other forms, notably *glīg*, *glīges* ‘mirth’ alongside *glīw*, *glīow*, see §3.18, and perhaps **nīge* ‘new’ beside *nīwe*, see Ekwall (1917c: 295).

- (3) The Gmc sequence */yw/ where */y/ often arose through Verner’s Law, see §4.4, usually simplified to */w/, but before */u(ɪ)/ at least */w/ was lost and */y/ remained. As under (2) above this led to alternations in OE, this time between /y/ and /w/, for example, Bede 4 33.382.3 *brēg* ~ *brēw* ‘eye-lid’,² *hīgan* ~ *hīwan* ‘family’, *hweogol* ~ *hweowol* ‘wheel’, *mūga* ~ *mūwa* ‘heap’. In the alternation *ēoh* ‘yew’ ~ *īw*, *ēow*, the latter forms also demonstrate voicing of */x/ by Verner’s Law. Other similar forms include *holh* ~ **holwes* (cf. PDE *hollow*), *rūh* ~ *rūwes* ‘rough’, *horh* ~ *horwes* ‘rheum’, *rēo* ~ *rēowe* ‘blanket’, but in these cases the situation is apparently complicated by the introduction of analogical ⟨g⟩ for /x/, see §7.54.

¹ Of course *īo* often develops to later *ēo*.

² *Brēg* with -*ē-* for *a*₁ is an Anglianism. The final /j/ here is due to palatalization.

IV Consonant loss

4.10 In PrGmc all final consonants except */s/ and /r/ were lost at a very early stage, but then during the WGmc period final consonants which had arisen by the loss of final vowels, see §§3.28–9, were again lost.¹ When final nasals disappeared in PrGmc they did so only after nasalizing the previous vowel, for consequences of this see for example §3.34. In the WGmc loss of final consonants one clear exception is final */r/, hence OE *fæder* ‘father’ and many other similar forms. It also seems to be the case that final voiceless fricatives were not always lost, and this would appear to be the explanation of many inflexional forms: gen.sg. of masc.neut. *a*-stems, such as *stānes* ‘stone’; nom.pl. of masc. *a*-stems, such as *stānas* ‘stones’; 2sg.pr.ind. of verbs, such as Angl *rīdes* ‘thou ridest’;² 3sg.pr.ind. of verbs, such as *rīdeþ* ‘he rides’, see further Brunner (1965: §234A4). But elsewhere there is variation between forms with and without final consonants, for example, *hæle*, *hæleþ* ‘man’. This may imply that the inflexional forms with retention of a final voiceless fricative have been influenced by the need to avoid syncretism of important inflexional forms.

¹ This development appears to be generally restricted to unstressed syllables, for final consonants remained in monosyllables, hence *hwæt* ‘what’, *æt* ‘at’. *Cū* ‘cow’ acc.sg. is probably from the nom.sg.

² WS *riðest* in fact shows the same retention of final /s/, since the final /t/ is a later sandhi development from forms such as *riðes þu?*

V West Germanic gemination

4.11 Perhaps the Gmc consonant change which has the most important morphological consequences for OE is that by which WGmc consonants were lengthened when followed by */j/. This change took place only after a light syllable, hence *dēman* ‘judge’, *sendan* ‘send’ without gemination against *fremman* ‘perform’ with gemination. The change is particularly marked in weak class 1 verbs where the thematic element *-j- caused gemination throughout the present tense except where the inflexion began with *-i-, that is, gemination occurred in 1sg.pr.ind., pl.pr.ind., subj., pl. imp., infin., and pr.part., for example, *fremme*, *fremmaþ*, *fremme(n)*, *fremmaþ*, *fremmende* against 2,3sg.pr.ind. *fremest*, *fremeþ*, sg.imp. *freme*, and all preterite forms, such as *fremede*. Further such examples are too numerous to list even selectively, but note that the same phenomenon occurs with ‘weak present’ such as *sittan* ‘sit’. Outside the verbal system gemination is found with *ja*-stems, such as *cynn* ‘race’, *jō*-stems, such as *synn* ‘sin’, *jan*-stems, such as *wræccā* ‘exile’, and similarly for adjectives. The alternations caused by gemination appear to have remained synchronically active in the weak verb system of OE, but elsewhere they came to have no synchronic relevance, especially after the degemination of final geminates, see §§7.80–1.

4.12 One major exception to WGmc gemination occurs with */r/ which is never subject to lengthening. Hence corresponding to *fremman*, see §4.11, are weak verbs of class 1 such as *nerian* ‘save’ (= /nerjan/). All forms with /rr/ are from parallel Gmc forms, such as *steorra* ‘star’, see §4.2. Note that in a form such as *nerian* /r/ is from Gmc *[z], which implies that rhotacism had already occurred, see §4.15, since */s/ is geminated, for example, *cnyssan* ‘knock’.

4.13 The fricative allophones of the voiced obstruents */b, d, g/, that is, *[β, ð, ɣ], were, when geminated, no longer single intervocalic consonants, and therefore they acquired stop articulation in gemination, see §4.3. Hence we find forms such as *hebban* ‘raise’ < **havjan*, *licgan* ‘lie’ < **lizjan*, and then alternation between forms with medial /bb, ðð/ and ungeminated forms with /f, j/,¹ for example, WS *heffþ* ‘he raises’, *ligþ* ‘he lies’. The same would theoretically apply in the case of the gemination of *[ð], note *biddan* ‘ask’, but in such cases the WGmc shift of *[ð] > [d], see §4.17, also occurs so that no alternation is visible in OE.

¹ /j/, of course, is due to palatalization of *[ɣ].

4.14 Perhaps slightly earlier than the above changes was another process of gemination by which consonants in a light syllable were lengthened when directly followed by a nonsyllabic liquid. Examples exist in OE only for /p, t, k, x/, such as *æpplas* < **aplos* ‘apples’ and hence *æppel*, similarly *snottor* ‘wise’, *wæccer* ‘awake’, *hweohhol* ‘wheel’. But frequently the ungeminated forms occur, presumably from the nom.sg., hence *snotor*, *wæcer*, and, with loss of intervocalic */x/, *hwēol*. Other forms similar to *hwēol* are *ēar* ‘ear of corn’, cf. Nbr *æbher*, *tēar* ‘tear’, cf. Nbr *tæher* (with ⟨h⟩ for ⟨hh⟩). And some forms have generalized the ungeminated forms, such as *æcer* ‘field’.¹

¹ For gemination of */j, w/ after a short vowel, see §3.17.

VI Miscellanea

4.15 Gmc */z/, which occurred either before a voiced consonant, see §4.3, or as the result of Verner’s Law, was rhotacized to /r/ in both North and West Gmc. The results are most obvious in strong verbs such as *ċēosan* ‘choose’ with pa.pl. *curon*, pa.part. *coren*, and in the comparative of adjectives, such as *blindra* ‘more blind’ < **blindōza*. The rhotacism also occurs in causative weak verbs such as *nerian* ‘save’ (< **nazjan*), *werian* ‘defend’. Other individual instances include *ēare* ‘ear’, *dēor* ‘animal’. Rhotacism must have occurred prior to the time of gemination, since */z/ would otherwise presumably have geminated in appropriate forms, just like other examples of */s/, see §4.12.

4.16 The */r/ which arises by rhotacism behaves like other examples of */r/ and is generally retained, see §4.10.¹ But between a vowel and a consonant, although it is usually retained, for example, *reord* ‘voice’, *heord* ‘hard of flax’, and other forms cited in §§3.20–1, it is sometimes lost, hence *mēd* ‘reward’ beside *meord* and *twīn* ‘linen’, cf. Ger *zwirn*. The group */zn/ also undergoes assimilation to /nn/ in **hrænn* ‘wave’, **rænn* ‘house’, but since first fronting has taken place in these words it must be assumed that the assimilation is later than that change.

¹ But one exception to this occurs in the weak forms of the personal pronouns which are the source of OE *we* ‘we’, *ge* ‘ye’, *he* ‘he’, *þe* ‘thee’, *hwa* ‘who’, cf. Ger *wir*, etc.

4.17 WGmc *[ð], whether from IE or due to Verner’s Law, is always occluded, hence many forms such as *fæder* ‘father’, *mōdor* ‘mother’, *gōd* ‘good’, *word* ‘word’. The change is of particular consequence in strong verbs showing a Gmc alternation between */θ/ and *[ð] due to Verner’s

Law. Hence verbs such as *weorþan* ‘become’ have pa.pl. *wurdon*, pa.part. *worden*.¹

¹ The variation between WS *fremde*, Angl *fremþe* ‘foreign’ is due to variant forms of the suffix with alternative accentuation and the consequent operation of Verner’s Law.

4.18 There appears to have been a voicing of WGmc */θ/ between */l/ and a following vowel, this voicing occurring before the occlusion discussed in §4.17. Consequently the group */lθ/ develops into OE as /ld/. Typical examples are: *fealdan* ‘fold’, *wilde* ‘wild’, *wuldor* ‘glory’, and further examples arise finally by analogical extension from inflected forms, such as *beald* ‘bold’, *feld* ‘field’, *gold* ‘gold’. But if */θ/ is followed directly in a compound by a second element beginning with *[h], then the voicing (and hence the occlusion) is prevented, for example, Ch 23, 24, LVD † *Balth-*, *Balð-*. In the early glossaries there is some evidence of confusion between the spellings ⟨d⟩ and ⟨ð⟩ and hence ⟨th⟩. Thus we find EpGl 755, CorpGl 1544 *spilth* for *spild* ‘ruin’, EpGl 754 *halði* for *healde* ‘sloping’, also 838 *ōhaelði*, cf. CorpGl 1572 *ōhældi*, CorpGl 1797 *feltha* for *felda* (also frequent BedeH *-felth*).¹

¹ But if /lθ/ arises in OE by syncope, the cluster arises too late for voicing and occlusion to occur, thus *hælp* ‘health’, *hild* ‘he hides’.

4.19 Initially in both North and West Gmc the group */θl/ shifts to /fl/, hence *flēon* ‘flee’ and probably *flāh* ‘deceptive’, cf. Goth *þliuhan*, *gaþlaihan* ‘comfort’. For the OE development of */θl/ in medial positions see §§7.11, 13.

Old English vowels

5.1 After the operation of the various Gmc and Inguaeonic sound changes discussed in Chapter 3, the stressed vowel system of the ancestor of OE may be assumed to have contained the following vowels and diphthongs: (1) long vowels: */i:/, e:/, æ:/,¹ o:/, u:/; (2) short vowels: */i, e, a,² o, u/; (3) diphthongs: */iu, eu, au, ai/. At this time the diphthongs showed no contrast in length, and simply had the same phonological status as long vowels.

¹ But /æ:/ occurred only in proto-WS and proto-Kt, since by the change discussed in §3.25 this sound had already been raised to /e:/ in the proto-Angl dialects, see also §§5.190–1.

² Phonologically /a/ at this time was a low vowel without specification for backness, see §3.23. It is possible, however, that phonetically ⟨a⟩ may have represented the back vowel [a].

5.2 A study of the earliest OE texts shows that between the Inguaeonic period and the time of these texts the whole phonological system of OE, including the stressed vowel system, underwent extensive changes. It is impossible to state an absolute chronology for these changes, but it is reasonable to accept that the majority of them occurred between the end of the fourth century, by which time the Anglo-Saxons had begun to settle in Britain, and the beginning of the eighth century, the period of the oldest surviving texts. Despite the difficulties, it is possible to hypothesize a relative chronology for most of the pre-textual (that is, prehistoric) changes, although much remains that is still open to debate. Below we discuss the changes in the stressed vowel system as far as possible in the order suggested by one reasonable relative chronology, although arguments for other chronologies will be discussed at appropriate points. The parallel changes in the unstressed vowel system and the consonant system are discussed in Chapters 6 and 7 respectively.

I First fronting and associated changes

(a) Nasalization and later rounding of Gmc */a/

5.3 By a change almost parallel to the nasalization and rounding of */a:/, see §§3.13–14, 22, Gmc */a/ is nasalized to *[ã] before nasal consonants. However, unlike /o:/ < */a:/ + nasal, the short vowel always remains distinct from OE /o/.¹ In the earliest period the vowel is spelled with both ⟨a⟩ and ⟨o⟩, and later developments would suggest that the scribes were attempting to represent a low back unround or round vowel, that is, [a] or [ɒ], see §2.13. The eventual loss of nasalization is difficult to date, but the presence of the variation between ⟨a⟩ and ⟨o⟩ in a seventh-century Lat loan such as *candel* ‘candle’, see §5.4, may suggest that the nasalization was present until at least that date. On the other hand, it is probable that the nasalization had been lost by the time of the eventual stabilization of the spelling, see further §5.6. For the later emergence of clearly rounded forms of this vowel, see §5.5. The change of nasalization may, however, be approximately characterized as follows:

$$\left[\begin{array}{c} \text{V} \\ +\text{low} \end{array} \right] > \left[\begin{array}{c} +\text{nasal} \\ +\text{back} \end{array} \right] / \text{_____} [+ \text{nasal}]$$

¹ For discussion of forms where Gmc */a:/ + nasal is subject to early shortening, see §§5.78, 199–200.

5.4 Typical examples of this change are:¹ *ram* ‘ram’, *nama* ‘name’, *camb* ‘comb’, *man* ‘man’, *hana* ‘cock’, *hand* ‘hand’.² The only significant morphological feature of this change is that to it is due the *a* of the past sg. of strong class III verbs with postvocalic nasal, for example, *bindan* ‘bind’ with pret. *band*, *swimman* ‘swim’ with pret. *swam*. Note that in INbr the expected **bond*, etc., see §5.5, are analogically reformed to *band*. In the two instances of such verbs where metathesis introduces an *r* between the vowel and the nasal, that is, *arn* ‘he ran’, *barn* ‘he burned’, the same variations between ⟨a⟩ and ⟨o⟩ are found as elsewhere, see Hogg (1982b) for the implications of these spellings. Early Lat loans, such as *candel* ‘candle’, *ancor* ‘anchor’, show the same spelling variations as native words, but late Lat loans are spelled with ⟨a⟩ even in the Angl dialects, for example, Ps(A) *plant*, where ⟨o⟩ would be expected.

¹ Only ⟨a⟩ spellings are exemplified; ⟨o⟩ spellings may be substituted according to §5.5.

² Beside *and*, *ond* ‘and’ is found *end* (EpGl 98 *ænd*), mainly in early nWS texts. The latter is to be derived from **andi* with *i*-umlaut, which existed alongside **anda* in Gmc.

5.5 As stated above, the spelling realizations of this sound change differ considerably according to dialect and date. In the earliest texts the spelling varies between ⟨a⟩ and ⟨o⟩. Thus EpGl has only ⟨a⟩ except in 712 *ōnettae* ‘anticipated (?)’ < **anhætidæ*, where the ⟨o⟩ may indicate lengthening and definitely indicates that *a* + nasal was rounded, see Luick (1914–40: §110A2); ErfGl has almost equal numbers of ⟨a⟩ and ⟨o⟩, similarly CorpGl. In the eNbr poems both ⟨a⟩ and ⟨o⟩ occur, but in LVD ⟨a⟩ is extremely rare. In the earliest Kt texts ⟨a⟩ is used, but in early ninth-century texts ⟨o⟩ is used almost exclusively, as in Ch 1188. This may be due to Merc influence, see Toon (1983: 93–6), for other ninth-century texts show use of both ⟨a⟩ and ⟨o⟩. In EWS usage varies, see Cosijn (1888a: §5) for details. In later texts there is a more clear-cut division between S. texts, where ⟨a⟩ predominates, and the Angl texts, where ⟨o⟩ predominates. Thus in LWS WHom 20 there are no examples of ⟨o⟩, and in OccGl 49 (tenth-century Kt) examples of ⟨o⟩ are infrequent. In these areas, no doubt, the sound had merged with other instances of /a/. Against this, Merc Ps(A) uses ⟨o⟩ exclusively (except for the late Lat loans of §5.4), and in INbr almost the same is found (with the exception of the analogical forms discussed in §5.4). Ru1 uses ⟨o⟩ more often than ⟨a⟩, and the appearance of ⟨a⟩ there could either be a feature imported from WS, see §1.8n3, or a characteristic of that dialect, see Toon (1983: 115–18). However, by the ME period the sound had merged with other instances of OE /a/ even in these dialects, with the exception of the WMidl. Although the rounding of **ā* indicated by ⟨o⟩ spellings may well have achieved phonemic status in WMerc, that is, /ɔ/, it seems unlikely that such phonemicization occurred elsewhere, even in Nbr, see Hogg (1982b) and, for another view, Kuhn (1961: §§3.3, 4.2).

5.6 The change of nasalization is probably the earliest of those discussed in this chapter, and it may well have taken place at the same time as the Inguaeonic shift of */a:/ > /o:/, see §3.22. The Inguaeonic character of the change is emphasized by parallel developments in OFris, such as OEFris *mon*, OWFris *man* ‘man’, and in the early OSax Merseburg Glosses, see Rooth (1932), Campbell (1947: 3–4), especially the examples in Rooth (1932: 48). Further, nasalization must have taken place before the period of first fronting (§§5.10ff.), for otherwise **a* + nasal would have developed to /æ/. The rounding of [ã] > [ɔ] characteristic of Nbr and especially Merc was rather later, for it is not clearly evidenced by the spellings of the earliest texts, such as EpGl. But the regular ⟨o⟩ spellings of Ps(A) and also of early ninth-century Mercianized Kt texts would seem to suggest that the rounding was a feature of the late eighth century, see further Toon (1983: 90–118) for full details and discussion.

(b) *Monophthongization of */ai/*

5.7 A further early change, occurring in all stressed syllables, is the monophthongization of the Gmc diphthong */ai/ > /a:/, where the length of the resulting monophthong is due to compensatory lengthening for the loss of *i*. There are a small number of cases where /o:/' rather than /a:/' is found, and it is probable that in the majority of these examples this is due to competing low stress forms, since in unstressed positions */ai/ > /o/, see §§6.4–5. Examples of such forms are: *ō* ‘ever’, *nō* ‘never’ and compounds, alongside *ā*, *nā*.¹ Some degree of rounding in all cases would also explain such forms, but that remains unproven, despite the rounding of /a:/' > /o:/' in S. dialects of ME, see Luick (1914–40: §369).² The change may be approximately characterized as:³

$$\left[\begin{array}{c} \text{V} \\ +\text{low} \end{array} \right] \left[\begin{array}{c} \text{V} \\ -\text{syll} \\ -\text{back} \end{array} \right] > \left[\begin{array}{c} +\text{long} \\ +\text{back} \end{array} \right] \emptyset$$

¹ Note Merc *ōēghwelc* ‘every’, *ōēghuuer* ‘everywhere’, with *i*-umlaut of /o:/' < */ai/.

² Other examples of *ō* for *ā*, such as CP 227.8 *sōrig* ‘sad’, are scarcely significant.

³ It is necessary to specify the long vowel as [+back] since it enters into contrast with /æ:/', whereas at this point there is no similar contrast between short low vowels. The lengthening can, of course, be more elegantly stated within a non-linear framework which would make clear the intrinsic nature of the compensatory lengthening.

5.8 Typical examples of this change are: */aik/ > *āc* ‘oak’, *bā* ‘both’, *brād* ‘broad’, *bān* ‘bone’, */hāljan/ ‘heal’ (with later *i*-umlaut, see §5.79(1)). Early Lat borrowings with Lat *ae* show the same development, such as *Caesar* > *cāsere* ‘emperor’.¹ The change has few morphological effects, but is found most notably in the pret.sg. of strong class I verbs, such as *rād* ‘he rode’.

¹ *Crēcas* ‘Greeks’, cf. Goth *Krēkos*, may have either Gk *ai* or Lat *ae*. In either case the Gmc development is unclear. The OE diphthongal form *Crēacas* is best explained as the equation of WS ⟨ea⟩ with Angl ⟨e⟩ before velars, see Flasdieck (1929: 342). It is unlikely that *Crēcas* is a late loan from OHG, see Luick (1914–40: §216 and references).

5.9 The chronology of this change is clear, since it must be later than the Inguaeonic shift of Gmc */ai:/' > /æ:/', for otherwise */ai:/' would also have developed to /æ:/'. On the other hand, the change must have been prior to the period of first fronting (§§5.10ff.), since otherwise by that change */ai:/' > */æi:/', which would surely have given /æ:/'.¹ The relative chronology of the OE sound changes is different from that of the corresponding OFris changes, since in OFris */ai:/' normally develops to *ē* (= /æ:/'/), except in environments where restoration of *a* would take place, and this suggests

the sequence */ai/ > */æi/ > /æi/ (> /e:i/).² For further details of chronology see Campbell (1959: §132).

¹ That first fronting preceded monophthongization of */ai/ is suggested by Luick (1914–40: §§121–2), largely on the basis of the difficult form *wēan* ‘woe’ acc.sg., with nom.sg. *wēa* < **waiwum*, cf. the expected *wāwa*, *wāwan*. Other explanations are equally implausible, see Brunner (1965: §128A3).

² Not all OFris forms can be so explained, but this must be the basis of the explanation, see Campbell (1939: 95–7), Steller (1928: §18), Siebs (1891: §29).

(c) *First fronting*

5.10 The general Inguaeonic tendency for low vowels to be fronted except in special circumstances is continued in OE (and OFris) by the change known as first fronting (or Anglo-Frisian brightening), whereby Gmc */a/, with the exception of nasalized *[ā] discussed in §§5.3–6, is fronted to /æ/ in most positions. The view of most modern writers, such as Luick (1914–40: §164), Campbell (1959: §§131, 139n1), Brunner (1965: §50), is that the shift was unconditional (except under conditions of nasalization), and that /a/ could later be restored in one of the following two ways. Firstly, before /w/ in all dialects, covered /l/ in Angl, and covered /r/ in Nbr, the following sequences of changes took place: (1) **clawe* > **clæwe* (first fronting) > *clawe* ‘claw’ acc.sg. (retraction rather than breaking); (2) Angl **ald* > **æld* (first fronting) > *ald* ‘old’ (retraction rather than breaking); (3) Nbr **arm* > **ærm* (first fronting) > **arm* ‘poor’ (retraction rather than breaking).² Secondly, after the period of breaking a sound change known as restoration of *a*, whereby */æ/ > /a/ when a back vowel appeared in the following syllable, for full details see §§5.35–8, would cause */æ/ < */a/ to revert to /a/. Thus we would find the following sequence of changes: **draxan* > **dræxan* (first fronting) > **dræxan* (breaking inapplicable, see §5.16n1) > *dragan* (restoration of *a*) ‘draw’. An older view, as expressed in, for example, Bülbring (1902: §§91, 127, 132–4), is that first fronting failed before /w/, covered /l/ in Angl, and covered /r/ in Nbr,³ and also that it failed in the environments for restoration of *a*, which was not seen as a real sound change.

¹ With the development of /æ/ and then restoration of *a*, there arose a phonemic contrast between the low vowels, best symbolized as /æ/ ~ /a/.

² For details of breaking and retraction see §§5.16–31.

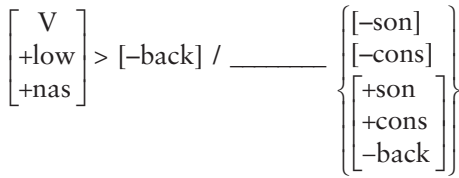
³ So too, at least in part, Quirk and Wrenn (1957: §203).

5.11 The arguments in favour of the more modern view are as follows. Firstly, and most importantly, forms such as *ēa* ‘river’ < **aho* must have the following development: **aho* > **æho* > **eaho* > **ēao* > *ēa*, or, in

Angl, **aho* > **æho* > **eaho* > **æho* > *æo* > *ēa*. If first fronting had failed because of the following back vowel, then the form would have been ***ā*. The same arguments apply to verbs of the *slēan* type, see §5.38. Nbr and Ru1 forms such as *slā*, *slān* ‘slay’ are then to be explained analogically, and are thus not counter-examples to this view. Hence restoration of *a* is a genuine sound change and must have taken place after the period of breaking. Parallel arguments apply to cases of breaking before /r/ and /l/, as in *pearroc* ‘enclosure’, *ġealla* ‘gall’. Forms of the type *clawe* are assigned a similar development on the grounds that first fronting was unconditional.

5.12 The arguments in favour of the older view of the interaction of first fronting and breaking/retraction are as follows. Most convincingly, it is claimed that a development of the type **clawe* > **clæwe* > *clawe* is both redundant and not demonstrable, and hence *clawe* should be assumed never to have had *æ*. Secondly, in those dialects which have *ald* rather than *eald*, it is equally redundant to posit a stage **æld*, although that stage will be needed in dialects with *eald*. Obviously, disregarding for the moment the question of restoration of *a*, the same will apply to forms of the type *galla* rather than *ġealla*. The same argument can be applied to cases of Nbr retraction before *r*-clusters, as in *barnum* ‘children’ dat.pl. For the interaction of restoration of *a* and first fronting, see below §§5.13, 38.

5.13 The position held here, and argued in more detail in §5.38, is that restoration of *a* was a genuine sound change and that in most, but not all, dialects it occurred after the period of breaking. On the other hand, there seems no justification for assuming an intervening stage **clæwe* in the development of *clawe*, nor for a similar stage in the development of *ald*. In the case of examples with following *r*-clusters, however, the variation of forms in Nbr (and the early Merc glossaries) demands the postulation of an intermediate stage with /æ/. It therefore seems likely that first fronting was prevented by a following /w/ or the velarized allophone of /l/, namely [ɫ], which occurred between back vowels or when covered by a following consonant, provided that the preceding vowel was not high or mid front, see §2.73.¹ It would appear that *r*, whatever its precise articulation, was not sufficiently back to prevent first fronting. It is particularly important to note that fronting occurred not only when **/a/* was monophthongal but also when it was the first element of the diphthong **/au/*, which was later to develop to *ēa*, see §§5.41ff.^{2,3} The new vowel created by first fronting is later subject to many developments according to environment and dialect: breaking, restoration of *a*, palatal diphthongization, *i*-umlaut, second fronting. The change may be approximately characterized as follows:



¹ Given the contrast between *eald* and *ald*, it is clear that in dialects with the former type /l/ was insufficiently velarized to prevent first fronting. For more detailed discussion see §5.15.

² Since */au/ > */æu/ regularly develops to /æ:a/ ((ēa)), see §5.41, I shall henceforth use the spelling *ēa* except where the distinction between it and */æu/ is crucial. But it should be remembered that *ēa* is not the product of first fronting. The same convention will apply to the eventual equivalent short diphthong.

³ Of course *u* in */au/ is a non-syllabic form of /u/, and does not equal /w/.

5.14 Examples of first fronting are too numerous to quote extensively, but the following are typical: **craft* > *cræft* ‘skill’, **sæh* (> *seah* by breaking) ‘he saw’, **cræbba* (> *crabba* by restoration of *a*) ‘crab’, **scæl* (> *sceal* by palatal diphthongization) ‘he shall’, **nærjan* (> *nerian* by *i*-umlaut) ‘save’. Alongside *clawe* with failure of first fronting before /w/ there are similar examples such as *awel* ‘hook’, *gesawen* ‘seen’, *þrawe* ‘punishment’ acc.sg.¹ For examples before [t] see §5.15 and for the effects of second fronting see §§5.87–92. Typical examples of the change as it applies to Gmc **au* are: *deað* ‘death’, **hæurjan* (> *hýran* by *i*-umlaut and other changes) ‘hear’. Early Lat loans with *a* or *au* show the same development as native forms, hence *ceaster* ‘city’ < **cæster* < *castra*, *cēas* ‘strife’ < *causa*.² Late Lat loans regularly preserve *a*, as in *castel* ‘village’.³ Similarly *au* is preserved in late loans such as *clauster* ‘cloister’ < *claustrum*.⁴ Morphologically this change shows few important features, but **a* > *æ* can be seen in the pret.sg. of strong class IV and V verbs, such as *stæł* ‘he stole’, *sæt* ‘he sat’. First fronting of **au* develops as *ēa* in the pret.sg. of strong class II verbs, such as *bēad* ‘he commanded’, *cēas* ‘he chose’. There are no significant dialectal variations for this change except before [t], see §5.15.

¹ However, if /i/ or /j/ directly follows, first fronting proceeds even before /w/, as in *ewe* ‘ewe’ < **æwi* < *ami*, *strewede* ‘he strewed’. /e/ here is the result of *i*-umlaut.

² The development of **au* > *ū*, seen in *clūster* ‘bolt’ < *claustrum*, *clūse* ‘enclosure’ < *clausa*, and the unlauded form *-clýsan*, is Lat, not OE.

³ Hence we find alternative forms, one, early, with the normal development to < *æ*, the other, later, with retention of Lat *a*, for example, *earc*, *arc* ‘ark’, *cearcern*, *carcern* ‘prison’. In a number of cases the situation is ambiguous, for example, *sealm*, *salm* ‘psalm’, where the latter may be due to the development outlined in §5.15, and in other cases we may simply be dealing with retention of the Lat orthographic form. Other examples show reborrowing much more clearly, for example, *lactuce* ‘lettuce’ against earlier *leahtrič*. For discussion see especially Campbell (1959: §§495–6, 545).

⁴ But there is a different development when *au* is here followed by a word-final liquid. In such cases the following liquid is syllabified and (presumably) velarized, and *u* is then lost, for example, Lat *caulis* > *cāl* 'cabbage'. Alternatively *u* may be retained under the influence of inflected forms, for example, *caules*, giving *cāul*. Later forms show retention of the diphthong with syllabic *l*, *r* represented by <-el, -er>, thus *cāwel* and *lāwer* 'laurel' < *laurus*, *Pāwel* < *Paulus*. For further discussion and references see Luick (1914–40: §§216 and A1).

5.15 The only significant dialectal variations concerned with first fronting occur when **a* is followed by covered and velarized [ɥ]. In these circumstances first fronting to *æ* with later breaking to *ea*, thus giving *eald* 'old' < **ald*, etc., occurs in some dialects, but in other dialects, as discussed in §§5.10–13, first fronting fails because of the velar quality of the following consonant. It must be assumed that, in those dialects where first fronting occurs, to be followed by breaking, the /l/ is insufficiently velarized to prevent fronting, whereas in the other dialects the degree of velarization is greater.¹ The position in the different dialects is as follows. In EWS there is considerable variation. The greatest degree of retention of *a* is seen in Hand A of Chron(A), where <a> occurs 94×, <ea> 16×, excluding personal and place-names, whereas in CP <ea> spellings predominate and in Oros <a> are even fewer.² In LWS <ea> spellings are normal, and <a> spellings are extremely rare.³ In Kt texts before 800 there is only one example of an <ea> spelling, namely Ch 31 (c.767) † *Uuealhbūnes*, which is scarcely trustworthy,⁴ but by the time of the tenth-century Glosses <ea> greatly predominates, for example, OccGl 49.160 *onwaldum* 'power' dat.pl., but see n2, and 338 *sald* 'given', alongside 692 *sealde*, 1039 *seald*, various forms of *eall* 'all', 287 *wealle* 'wall'. In the circumstances the <a> spellings cannot be said to provide convincing evidence of the persistence of an *a*-dialect. In Angl dialects, on the other hand, <a> spellings are practically universal, the only exceptions being the frequent use of <ea> in Ru1, especially in *eall*, the Merc Ch 89 *Ealduuft* and EpGl 713 *fealga* 'harrows'. The forms in Ru1 are almost certainly due to WS scribal influence and neither of the other two forms can be regarded as fully trustworthy.⁵ From this distribution we may conclude that in the North and Midlands there was a single *a*-dialect whereas in the South there were originally two sub-dialects, an *a*-dialect and an *ea*-dialect. Gradually, however, the *ea*-dialect encroached on the *a*-dialect, although the geography of the change remains obscure. Typical examples of failure of first fronting before covered [ɥ] are: *all* 'all', *ald* 'old' and the preterites of the class 1 verbs *sellan* 'give', *tellan* 'tell', etc., that is, *salde*, *talde*. In dialects where first fronting proceeds to be followed by breaking, we find *eall*, *eald*, *sealde*, *tealde*. It follows from what was said in §5.13 that in those dialects where covered /l/ inhibits first fronting, it would be reasonable to suppose that /l/ between back vowels would also inhibit first fronting. Therefore Ps(A) 79.10 *-wala* 'root', 57.6 *galend* 'enchanter',

CorpGl 310 *falud* ‘fold’,⁶ Ep, ErfGl 1462 *scalue*, CorpGl 976 *scala* ‘scale’ and similar forms in Nbr are due to failure of first fronting rather than restoration of *a*.⁷

¹ It might be claimed that this account makes first fronting unnecessarily complicated, but since the argument above, if it were not applied to first fronting, would have to be applied to breaking before /l/ in exactly the same form, as in Girvan (1931: §62A1), such a claim carries no weight.

² Even in those EWS texts where ⟨ea⟩ spellings predominate *onweald* ‘power’ tends to have the stereotyped spelling *onwald*, cf. here the Kt form cited below. For a full discussion of this rivalry between two dialect types and the special status of the sequence *-wald-*, see Stanley (1969), Lutz (1984), Hogg (1988).

³ In ÆHom there appears to be only one form with an ⟨a⟩ spelling, ÆHom 23.115 *all*. But this is most probably due to weak stress. Two apparent examples in ÆGl *dalc* ‘clasp’, *fald* ‘fold’ are from earlier **daluc*, **falud*, see also n6.

⁴ Also worthy of note is the late seventh-century Kt form Ch 8 † *AEldredi*. But it is doubtful whether this genuinely indicates that even in *a*-dialects there was an intermediate stage *æ*, as claimed by Toon (1983: 130), both because of the uncertain status of the text and because there is good reason to suppose two rival dialects in the Kt of the time.

⁵ Note that *fealga* lacks Angl smoothing.

⁶ Alongside CorpGl 1920 *falaed*, also in Ep, ErfGl, which shows interchange of the unstressed vowel, see §6.64.

⁷ Luick (1914–40: §146) restricts such failure of first fronting to Merc, but there seems no logical reason for supposing that it might happen in that dialect but not in the other *a*-dialect areas. A similar failure in Nbr helps to explain the interesting observation of Ball (1962: 143) that in Nbr, although restored *a* is frequently levelled out by analogy, the opposite occurs before *l*, where there is extension of *a*. Examples include: DurRitGl *stale* ‘theft’, *tal*, *tales* ‘tale’, Ru2 *tale*, Li *tal*, etc., *huales* ‘whale’.

II Breaking

5.16 Very early in the prehistoric OE period the front vowels \check{a} , \check{e} and \check{i} were diphthongized when immediately followed by a velar or velarized consonant or consonant group. The consonant and consonant groups before which diphthongization occurred are: (1) the voiceless velar fricative /x/, usually spelled ⟨h⟩, see §2.60;¹ (2) the velarized liquid [ɫ] when covered by a following consonant, including itself;² (3) the liquid /r/ when it was similarly covered, which was either velarized or had an articulation similar in effect to velarization, see §2.74 and Lass (1977); (4) the labiovelar approximant /w/.³ Between the front vowels and these consonants there developed a transitional glide which in the first instance would be a non low, nonsyllabic back vowel, that is, /u/ or /o/. At a later stage, certainly by the time of the earliest written texts, this glide developed into a nonsyllabic back vowel of the same height as the preceding front vowel, see §§5.41–6 for details, and hence the diphthongization may be summed up as $*\check{a} > \check{e}a$,⁴ $*\check{e} > \check{e}o$,

* \ddot{i} > $\ddot{i}o$.⁵ The traditional name given to this development, a calque from Grimm (1822), is breaking or, following Mayhew (1891), fracture.⁶ Where the vowel which is broken (see n6) is long, the resultant diphthong is identical with the diphthongs which developed into OE from Gmc, but where the broken vowel is short, the resultant diphthong is equivalent in length to a short vowel, and hence the new contrast in OE between long and short diphthongs first arises at the time of breaking, see §§2.19–29 for discussion. The diphthongs which arise from breaking are subject to such later developments as *i*-umlaut and, where applicable, Anglian smoothing, as well as the general changes affecting all OE diphthongs variously. This sound change displays many similarities to the later *u*-*la*-umlaut, see §5.103 for discussion.

¹ It is especially important to note that diphthongization did not occur before the voiced velar fricative /ɣ/, for example, *wegas* ‘ways’, not ***weogas*, *dragan* ‘drag’, not ***dreagan*, see also §5.10. The explanation for this remains uncertain, see Hogg (1979b: 91–6). Note further that although many writers distinguish between diphthongization before /x/ and diphthongization before /xC/, where C may equal /x/, this is a distinction without a difference.

² Diphthongization thus occurs before /ll/, as in WS *eall* ‘all’, but with the exception of /ll/ due to gemination in WGmc, where the palatalizing effect of following /j/ gave [llj] rather than [H]. Thus we find *hell* ‘hell’, *sellan* ‘give’ < **halj-*, **saljan*, and many other similar forms. Note that in the Angl dialects where first fronting failed before [H], there is the parallel contrast of *all* v. *hell*, *sellan*, see §5.15. Since /rɾ/ is never due to WGmc gemination, diphthongization occurs freely before that cluster. On the other hand, diphthongization will not occur before ungeminated /rj/, since /j/ has the same palatalizing effect on /r/ as it does on [llj] < *[hj]. Examples are **nærjan* ‘save’, **hærjas* ‘armies’. But diphthongization always occurs before /xx/, even when /xx/ is the result of WGmc gemination, as in *hlibban* ‘laugh’ < **hleabhjan*. For the status of breaking before /w/ followed by /i/ or /j/, see §§5.20, 5.24.

³ Some writers suggest /u/ rather than /w/ here, but this can hardly be correct.

⁴ ⟨ea⟩ is, of course, the regular spelling for /æa/, /æā/, see §2.34 and §5.13n2.

⁵ In a few early texts unbroken forms are recorded. Almost all cases are of proper nouns, but note the following: (1) for *eo*: EpGl 15 *herth* ‘hearth’, CorpGl 2108 *huerb* ‘whorl’; (2) for *ea*: EpGl 25 *isærn* glossing *alchior*, where there may be confusion with *isern* ‘iron’, EpGl 592 *bærs* ‘perch’, where /r/ is unmetathesized, see §5.26. For the last two examples see Pheifer (1974: §43.1). Other examples occur quite commonly in mss. written in a foreign hand, such as ErfGl, LdGl. *Hærfest* ‘harvest’ is to be explained under *i*-umlaut, see §5.76, and WS *Ælfred* is probably due to borrowing from Angl, but could also be from the type of WS which has failure of first fronting before *l*-groups, see §5.15.

⁶ For criticism of the term ‘breaking’ (and associated terms such as ‘broken’) see Quirk and Wrenn (1957: §201). Despite the justness of their criticisms, the terminology is so well established that it would be futile to attempt to avoid it.

5.17 Although the individual details of breaking are remarkably homogeneous over the OE dialects (with the exception of the related forms discussed in §5.15), there is considerable variation according to phonological

environment. An adequate rule of thumb, however, is that the likelihood of breaking decreases in relation to increasing height and length of front vowel. In the following discussion the vowels are treated in an order which has the most frequently broken vowel first, the least frequently broken vowel last.

5.18 In a number of cases a short front vowel is not broken but is, rather, retracted to the equivalent back vowel, that is, $*æ > a$, $*e > o$, $*i > u$. Such retraction takes place only where there is some additional phonological environment, normally a labial consonant (most frequently /w/) preceding or following the consonant which is the immediate cause of breaking. It is, perhaps, preferable therefore to call this process combinative breaking, which may be viewed as the implementation of a *w-* or [labial]-prosody. Details and examples of combinative breaking are discussed in §§5.28–31.

(a) *'Simple' breaking*

5.19 Notwithstanding the various differences discussed below, the following formulation of breaking is a useful starting-point for reference, to be modified in the light of further discussion:

$$\emptyset > \left[\begin{array}{c} \text{V} \\ +\text{back} \\ -\text{syll} \\ +\text{high} \end{array} \right] / \left[\begin{array}{c} \text{V} \\ -\text{back} \end{array} \right] \longrightarrow \left[\begin{array}{c} \langle \left[\begin{array}{c} +\text{obst} \\ -\text{voic} \end{array} \right] \rangle_a \\ \langle \left[\begin{array}{c} -\text{obst} \\ +\text{cons} \end{array} \right] \rangle_b \\ +\text{back} \\ +\text{cont} \end{array} \right] \langle [+cons] \rangle_b$$

Condition: Either $\langle \rangle_a$ or $\langle \rangle_b$.

5.20 As stated in §5.17, /æ/ is the vowel most frequently broken, and indeed combinative breaking is also more frequent with this vowel, see §5.29. The diphthongization of /æ/ is to /æ̃u/, later /æ̃a/, normally spelled ⟨ea⟩.¹ Before /x/ diphthongization is regular in all dialects, although in Anglian there is later monophthongization, see §§5.93, 98. Typical examples are: *seah* 'he saw', *geneahhe* 'abundantly', *eahta* 'eight'.^{2,3} Examples of diphthongization before medial /x/ which is later lost, see §§7.45, 51, include *ēar* 'ear of corn', cf. LiGl *eher*, Ru1 *æhher*, *slēan* 'slay'.⁴ As discussed in §§5.10–15, the occurrence of /æ/ before *l*-groups is dialectally restricted, and the details of its distribution are given in §5.15. In LWS and Kt, the dialects where /æ/ was most common originally, typical examples of the diphthongization are: *eall* 'all', *healf* 'half'. Similar forms predominate in EWS alongside *a*-forms, see again §5.15 for further details. Diphthongization

before *r*-groups is regular in all dialects, although in Nbr especially combinative breaking is frequent in a labial environment, see §5.29.⁵ Examples of diphthongization are: *dearr* ‘he dares’, *heard* ‘hard’, /æ/ occurs before /w/ only in the sequence /æwi/, and in that sequence breaking fails, see §5.14n1 for examples.

¹ Examples of ⟨eo⟩ and ⟨æu⟩ spellings found in early texts are given in §2.34; note also the occasional alternative ⟨æa⟩. Examples of spellings with unbroken *æ* are given in §5.16n5.

² For all vowels the following order of discussion is used: (1) before /x/; (2) before covered /l/; (3) before covered /r/; (4) before /w/. Where appropriate the order of examples within each subdivision is: (1) before C; (2) before C₁C₁; (3) before C₁C₂.

³ Alongside normal *meht* ‘might’ or, with Angl smoothing, *mæht* we find Ps(A) *maht*, OccGl 54 *almabtig*, both Merc, and Kt Ch 1508 *almabtig*. It is possible, but not certain, that these forms indicate the occurrence of combinative breaking outside its normal limits, see §5.31.

⁴ For Nbr *slā(n)*, etc., see §5.38.

⁵ The only instances where *a*-spellings are found outside the normal limits of combinative breaking are: LVD † *Arduini*, LiGl (2×), DurRitGl 8.62 *arg* ‘cowardly’, LiProlMt 8.62 † *darr* ‘he dares’. *Art*, *parf* are low stress forms, as, most probably, is Cæd(L) *-gard* against Cæd(M) *-ġeard*. For Nbr *arn* ‘he ran’ see §5.4 and for Nbr *darste* ‘dared’ see §5.34. Note also CP *ġearnunga* ‘merits’ (2×), occasionally also elsewhere, which is probably a scribal error.

5.21 Where it occurs long /æ:/ is broken to /æu/, by the time of the earliest texts /æa/, normally spelled ⟨ēa⟩.¹ The only instances can be of WS *æ₁*, and these parallel the examples under §5.23 for nWS *ē*. Typical WS examples include: *nēah* ‘near’, *nēalāccan* ‘approach’, *nēawest* ‘nearest’, *nēar* ‘nearer’. Unlike /æ/ it must be assumed that /æ:/ regularly occurred before /w/, for otherwise the nWS development to /e:/ cannot be satisfactorily explained, see §3.22n1. In such an environment there is, however, no diphthongization but rather retraction to /a:/, for example, WS *sāwon* ‘they saw’.² Rather more difficult to explain are the strong class VII verbs such as *blāwan* ‘blow’, *cnāwan* ‘know’, *sāwan* ‘sow’, where /a:/ is found in all dialects. For discussion and references see Brunner (1965: §63A2).

¹ For the long diphthongs from breaking there do not appear to be any examples of the types of spelling referred to in §5.20n1.

² In *tāwian* ‘prepare’ and *ġetāwe* ‘armour’ the length of the vowel is uncertain, see §2.91n4 and reference.

5.22 The short vowel /e/ is regularly broken to /eū/, by the time of the earliest texts /ēō/, with the spelling ⟨eo⟩,¹ before /x/. Typical examples are *feoh* ‘cattle’, *feohtan* ‘fight’. The lack of examples before /xx/ is accidental, cf. *tiohhian*, §5.24. A typical example of diphthongization before medial /x/ which is later lost is the contracted strong verb of class VI *sēon* ‘see’

< **seuhan* < **sexan*, see §5.32. Diphthongization is, however, more restricted before *l*-groups, see §5.24, where /l/ was sufficiently velarized to cause breaking only in the groups /lx, lw/, containing a following velar, examples being: *eolh* ‘elk’, *ġeolwe* ‘yellow’,² *meolwes* ‘meal’ gen.sg.³ The single exception to this is in the group /selC/, where breaking appears to occur if the following consonant is /f/.⁴ Only two words show the change: nWS *seolf* against EWS *self*, LWS *sylf* ‘self’,⁵ and Gen 2167 *asealcan*, CP 275.20 *aseolċe* ‘languish’, and since *asealcan* is a nWS form there must be some doubt as to the degree of penetration into WS of this change. Before *r*-groups the diphthongization is fully implemented, for example, *steorra* ‘star’, *eorl* ‘warrior’.⁶ Before /w/ diphthongization is equally regular, typical examples being: *hweowol* ‘wheel’, *cneowe* ‘knee’ dat.sg.⁷ For the development of breaking diphthongs under *i*-umlaut see §§5.82–4.

¹ The early spelling ⟨eu⟩ is found only in the proper name Bede(M) † *Ēumer*, with loss of *h* and compensatory lengthening, see §2.33.

² Note LRid 10 *ġeolu* for *ġeolu* and see further n3 and §5.105n2.

³ Pace Luick (1914–40: §137A1), who, followed by most other authorities, denies breaking of /e/ before /w/. In that case the diphthongs of the two examples must be due, as Luick says, to analogical transfer from the nom.sg. forms *ġeolu*, *meolu*, where *u*-umlaut would occur, see §§5.103, 111(1). This might explain the apparent rivalry of *meolu*, *meolwes* and *melu*, *melwes*, since the undiphthongized forms would be due to failure of breaking before /w/ or the analogical extension of these forms. But note that there are no examples of undiphthongized forms of *ġeolu* except in the nom.sg. in the Merc glosses, where *ġelu*, etc. may be due to early date and conservative spelling, see Pheifer (1974: §56), Ball and Stiles (1983), and the contrast with *meolu* is unexplained. It is also the case that the same rivalry is seen in *smeoru* ‘fat’, where, for example *smeru* is the slightly more frequent form in Lch, and the absence of a diphthong in this word cannot be due to inflected forms, since there is no reason to suppose that breaking failed before /rw/. It would appear more probable that the explanation is that *u*-umlaut sporadically failed in the nom.sg., see §5.111(1), and, for further discussion, Ball and Stiles (1983). It may also be added that it is more plausible phonetically to suppose that breaking occurred before /w/ than to suppose it did not.

⁴ *Leolc*, pret. of *lācan* ‘play’, is most probably due to *u*-umlaut.

⁵ See §5.171n2 for discussion of the development of these forms in LWS.

⁶ EpGl, ErfGl 944 *smeruui* ‘fat’ dat.sg. may be due to the analogy of *smeru* without *u*-umlaut, see n3 above and also Chadwick (1899: 127). Note also EpGl, ErfGl *teru* ‘tar’.

⁷ But in *cnēo(w)*, where *w* is due to analogical extension, the diphthong is due to the Gmc development of **knewaz* > **kneu* > *cnēo*.

5.23 The long vowel /e:/ is broken to /eu/, by the time of the earliest texts /eo/, with the spelling ⟨ēo⟩. By chance there are no examples of diphthongization of /e:/ < Gmc **ē*₂,¹ and hence the only examples are of nWS *ē* = WS *ĕ*₁. Further, the only examples of breaking of nWS *ē* occur before /x/, and in Angl the resultant diphthong is monophthongized by Angl smoothing unless /x/ is firstly lost, see §§5.93, 102. Angl examples are

Ps(A) *nēolǣcan* ‘approach’, *nēowest* ‘nearest’. The only possible Kt examples, where there is no monophthongization, are: CollGl 12 *nīor*, Ch 1200 *nēor* ‘nearer’.²

¹ The *-ēo-* preterites of strong class VII verbs with *-lC*, such as *fēoll* ‘he fell’, can scarcely be due to breaking, given the known restrictions on breaking of *e* before *l*-groups, see §5.22.

² Angl *nēst* ‘next’, *nēsta* ‘neighbour’ possibly show failure of breaking before */x/* when */i/* stands in the next syllable, if they are parallel examples to the Surrey Ch 1508 *nēst*, where failure of breaking is the most probable explanation. See, however, §5.100 and n1.

5.24 The short vowel */i/* is regularly broken to */iū/*, later */iō/* with further development to */ēō/* in many dialects, see §§5.155–62, and is normally spelled ⟨io, eo⟩.¹ Typical examples with diphthongization before */x/* are: *meox* ‘manure’, *tiohhian* ‘consider’, *Peohtas* ‘Picts’. All such examples are relatively infrequent, and the only examples of breaking before */xC/* are from proper names; thus in addition to *Peohtas* we have *Wioht* ‘Isle of Wight’. Since */i/* is often followed by */i/* or */j/* in the next syllable, most forms are found with *i*-umlaut of the breaking diphthong, for example, **sihiþ* > **siuhiþ* > WS *sihþ*, Kt *siohþ*, Angl *sīþ* (with Angl smoothing, see §5.94, and loss of *h* with compensatory lengthening, see §5.124) ‘he sees’. Breaking of */i/* before [ʰ] is found only in **filhiþ* > **fulhiþ* (> WS *filhþ* by *i*-umlaut, Angl *fileþ* by Angl smoothing). Otherwise there are no examples, cf. the position with */e/* in §5.22. In WS and Kt */i/* is regularly diphthongized to */iū/* before covered */r/*. All relevant forms have following */i, j/* and the diphthong is subject to *i*-umlaut. Typical LWS examples are *yrre* ‘anger’ (< **iurri*), *afyrrian* ‘remove’, *birhto* ‘brightness’. In Kt *io* remains under *i*-umlaut but then merges with *eo*, see §5.160. Note, however, CollGl 49.646 *iorsienne* ‘become angry’, 526 *stiorče* ‘calf’ dat.sg. In Angl dialects breaking of */i/* failed before *r*-clusters if */i, j/* stood in the next syllable, hence various forms of *afirran* ‘remove’, *smirwan* ‘smear’, *hirtan* ‘encourage’, CorpGl 740 *gesuīrbet* ‘polishes’, *čirm* ‘noise’, ?† *čirn* ‘churn’,² *čirnel* ‘kernel’, *first* ‘roof’. In a number of cases it is theoretically possible that breaking might have first occurred to be later removed by Angl smoothing, for example, Ps(A) *birhtu* ‘brightness’, EpGl, ErfGl 792 *birčiae*, CorpGl 1609 *birče* ‘birch’, but it is simpler to assume that breaking failed here as in other cases. Against these forms we find a number of examples where breaking has apparently occurred, notably Angl *iorre*, *eorre* ‘anger’ and the proper name element LVD, KSB 12 † *Iurmin-*, *Iurmen*.³ Neither form is easily explained.^{4,5,6} For discussion of breaking before metathesized *r* (half-breaking), see §5.26. */i/* before */w/* is regularly diphthongized in all dialects, except where */i, j/* follows in the next syllable and prevents the change,⁷ hence *niowul* ‘prostrate’ against *niwel*, cf. *niwol*, *aseowen* ‘sifted’ against *gesiwed* ‘sewn’.

¹ For examples of the early spelling ⟨iu⟩ see below.

² *Ċirm* may be an error for *ċirn*, but see Wakelin (1977).

³ Compare Bede † *Irmin* and the Kt Ch 8 *Irmin*, texts where breaking diphthongs are often omitted.

⁴ But it is noteworthy that these are the only examples where /i/ is initial, which might offer a possible explanation.

⁵ There are some other forms where ⟨io⟩ appears, namely *hiorde* ‘herdsman’ *leornian*, *liornan* ‘learn’. In these cases we are presumably dealing with breaking of analogical /e/. For their subsequent development see §5.84.

⁶ There is a divergent development to ⟨ie⟩ in EpGl 595 *fierst* ‘roof’, 933 *orfermae* ‘squalid’, 990 (also ErfGl) *georuierdid* ‘disgraced’, and a further variation occurs in EpGl, ErfGl 762, CorpGl 1599 *sifunsterri* ‘Pleiades’, MtGl(Ru) 26.12 *smerenisse* ‘ointment’, and, unless this is a scribal error, ErfGl 933 *orfermae*. The ⟨e⟩ spellings are most probably indicative of lowering rather than diphthongization, and it may be that the ⟨ie⟩ spellings have the same intention, see §5.164. On the other hand, it is possible that ⟨ie⟩ is intended to indicate the *i*-umlaut of *io*. In either case these spellings would suggest an underlying WS or WS-related source for the early Merc glossaries, see Wynn (1956: 362–3).

⁷ Luick (1914–40: §143), following Bülbring (1900a: 85), suggests that /w/ before /i, j/ had the quality [ɥ], so preventing breaking.

5.25 Diphthongization of /i:/ to /iu/, later /io/, etc., regularly spelled ⟨iō, ēō⟩, is considerably more limited than that of /i/, being found only before /x/. Typical examples are: *betwēoh* (*betwīoh*) ‘between’, *lēoh* ‘light’. Cases of diphthongization before medial /x/ which is later lost, see §§7.45, 51, include *betwēonum* ‘between’ and the contracted verbs of strong class I such as *tēon* ‘accuse’ < **tīohan* < **tīxan*, see §5.32. In Angl, where smoothing occurs, the relevant forms regularly have *ī*, for example, *betwīh*.

5.26 Due to metathesis, for which see §7.94, an *r*-cluster can arise which is apparently identical to that which causes breaking, and before such a cluster a change takes place which is closely related to breaking. The change is, however, too late for the normal processes of breaking, and instead we find a shift which we may term half-breaking. Under half-breaking the only vowel which is affected is /i/,¹ and it comes to be represented in EWS by ⟨ie, i, y⟩, in LWS by ⟨y⟩, and in Angl by ⟨io, eo⟩ or their variants.² We may suppose that the development in WS implies an identity with the other sequences represented by ⟨ie⟩, etc., see §§5.163–4. Therefore half-breaking could in WS be interpreted as either diphthongization or lowering, whilst it is reasonable to assume simple diphthongization in Angl. But the differences may be chronological, see Luick (1914–40: §§262, 136A1).³ Typical examples are: EWS *biernan* ‘burn’, *iernan* ‘run’, *fierst* ‘period’, alongside less frequent *birnan*, *byrnan*, *irnan*, *first*, *fyrst*; LWS *byrnan*, *yrnan*, *fyrst*; Merc *beornan*, *eornan*; Nbr *biorna*, *iorna*.⁴

¹ /i:/ cannot occur under these circumstances, since metathesis only occurs with short vowels. It is clear that nonhigh vowels are not subject to half-breaking and that the normal situation is retention of /e, æ/, as in: *berstan* ‘burst’, *fersc* ‘fresh’, *bærst* ‘he

burst', *gærs* 'grass'. For *bærs* 'perch', see §5.16n5. Examples such as LWS *bearn* 'he burned', *earn* 'he ran', are due to the analogy of *wearþ*, etc.

² The position in Kt is unclear.

³ There seems no reason, however, to accept Luick's postulation of sporadically early metathesis to explain EWS *biernan*, etc. See also Chadwick (1899: 125).

⁴ Possible additional forms are to be in EWS *bierþ* 'he bears', etc., where the *r*-cluster is due to syncope, but these may equally be cases of ⟨ie⟩ for ⟨i⟩.

5.27 The most significant feature of breaking with regard to early Latin loans is that the breaking of Lat *e* is to /æ̃a/, which probably signifies that Lat *e* was a lower vowel than the corresponding OE sound. Thus we find *earfe* 'tare' < Lat *ervum*. The breaking of Lat *a* > OE *æ* is not to be distinguished from breaking of *æ* < Gmc **a* discussed above. Hence we find: *sealm* 'psalm', see §5.14n3, *earc* 'ark', *leahtric* 'lettuce'. In ILat Lat loans *a* remains and thus is not subject to breaking, giving rise to doublets such as *earc*, *arc* and *ċearċern*, *carċern* 'prison'. In the case of *ærċe* 'arch-', borrowing presumably took place between the time of breaking and the time of *i*-umlaut, for this will explain the presence of unbroken *æ* (and also of *ċ*). The same explanation could possibly hold for the more difficult *ælmesse* 'alms' < Lat **alimōsina*.

(b) Combinative breaking

5.28 In certain environments and in certain dialects the combination of a following *r*-cluster and a preceding or following labial consonant, most commonly preceding /w/, causes retraction rather than diphthongization.¹ The change is only demonstrated with short vowels, where we find /æ/ > /a/, /e/ > /o/, /i/ > /u/. The change exceeds the normal limits of breaking in that combinative breaking of /i/ in Angl takes place even if /i/ or /j/ stands in the following syllable, cf. §5.24 and see §5.31 for examples. On the other hand, if /r/ is followed by a back consonant there is no combinative breaking, for examples see below.² The details of combinative breaking of /æ, e, i/ are discussed in §§5.29–31.

¹ The only instance of combinative breaking before a consonant other than /r/ is WS *tuwa* 'twice' < **twuwa* < **twiwa*. Such a development is phonetically logical and the absence of other forms is accidental. *Twiwa* is due to the analogy of *twiga*, and it can then develop to *tweowa* by *a*-umlaut.

² The circumstances of this failure of combinative breaking are identical to those of Angl smoothing, and this led Bülbring (1902: §265) to suppose, somewhat implausibly, that at least in some cases combinative breaking was later than smoothing.

5.29 /æ/ is retracted to /a/ in Nbr and the early Merc glossaries in the sequence /C_iærC_j/ when either C_i or C_j is labial, thus in a more extensive phonological environment than that for the retraction of nonlow vowels,

see §§5.30–1.¹ The sole examples in eNbr with only a preceding labial are CædH 1 *uard* ‘guardian’, RuneAuzon *warþ* ‘he became’; examples with only a following labial are: BDS 2 *tharf* ‘need’, Bede(M) 207 † *Iaruman*; examples with both a preceding and following labial are: LRid 5 *uarp* ‘warp’, Bede(M) 242 † *Baruæ* ‘grove’ dat.sg. (as place-name). In the principal texts of INbr examples of retraction include: *arm* ‘arm’, *arm* ‘poor’, *barm* ‘bosom’, *farr* ‘bull’, *harm* ‘harm’, *þarf* ‘need’, *gēsparriga* ‘bolt’. The preterites *warþ*, *warþ* are especially frequent, where the retraction may have been promoted by the analogy with similar strong verbs such as *halp*, etc., see Luick (1947–40: §147). Examples in the early Merc glossaries are: ErfGl 108 *foe[s]tribarn* ‘foster-child’, 333, 737 *-uard* (= *warþ*), EpGl, ErfGl 897 *sparu(u)a* ‘calf of leg’, CorpGl 1795 *þuarm* ‘cutting tool’, 2140 *tharme* ‘entrails’ (alongside 870 *þearm*), 88 *sarwo* ‘artifice’ (cf. 545 *seorwum*), 426 *warr* ‘corn’.^{2,3} Outside these texts examples are rare, although Ru1 has a few forms such as *warþ* ‘became’, *iarwian* ‘prepare’ and note also the Kt Ch 1200 *barna* ‘children’ gen.pl.⁴ At all periods the change is incomplete and there are many forms with diphthongization rather than retraction. Thus in eNbr we find: Bede(I) *Bearuæ*, LVD *Georored*;⁵ in INbr many of the forms quoted above are also spelled ⟨ea⟩ (or ⟨eo⟩, see §5.44, and, for Merc, §5.45): LiGl *þearf*, DurRitGl *earm* ‘arm’, and several words have only diphthongs, such as *bearu* ‘grove’ cf. above, *ċearf* ‘he cut’, *hearpe* ‘harp’, *hwearf* ‘he turned’, *šċearp* ‘sharp’. Examples from the early Merc glossaries are: EpGl 737 *-uueard*, EpGl, ErfGl 435 *spearu(u)a* ‘sparrow’ (?), EpGl 108, CorpGl 131 *fostorbearn*.

¹ For possible examples of combinative breaking outside its normal limits, see §5.20n3.

² For either *warr* or *wear(r)*.

³ Forms before geminate *rr* are in Nbr almost certainly and in the Merc glossaries possibly due to early restoration of *a*, see §5.38. An example from LiGl is *gēsparrado* ‘I bolted’, cf. also *naru* ‘narrow’. In Merc we find CorpGl 1451 *bisparrade* ‘bolted’, LdGl 93 *uarras* ‘calluses’.

⁴ *Arwe* ‘arrow’ has only retracted *a* in all dialects.

⁵ Possibly also in Rune48 *bæurnæ*, see §2.34.

5.30 In Nbr, almost exclusively, */e/* is retracted to */o/* in the sequence */werC/* where *C* is [-back].¹ Frequent examples from Li, Ru2, DurRitGl are: *swurd* ‘sword’, *worþa* ‘become’, *worþia* ‘honour’, *worþa* ‘throw’, *worþ* ‘worth’. Ru2 has occasional forms without retraction, mostly in *weorþian* but also in *cwearne* ‘mill’ dat.sg. Outside Nbr we have only the untrustworthy ErfGl 911 *aquorna* ‘squirrel’ alongside EpGl *aqueorna*.² Nbr examples of the failure of the change where *C* is [+back] (and hence a smoothing environment occurs, see §5.93) include: *werc* ‘work’,³ but cf. EpGl 556 *algiuueorc* ‘fire-making’ (?), *dwerg* ‘dwarf’, *þwerh* ‘cross’. LWS forms with *wur-*, such as *swurd* ‘sword’, are due to a separate development, see §§5.183–7.

¹ DurRitGl *farr* ‘far’, Li *farra* ‘from afar’ are most probably errors for *fearr*, *fearra* with NNbr (ea) for (eo), see §5.44(2), and thus do not clearly indicate that preceding /f/ could also cause retraction > /a/ as suggested by Bülbring (1902: §272), see, however, 5.31n4. Other cases supposedly showing such retraction are DurRitGl *ymbhwarfað* ‘they go round’, which is probably an error for *ymbhwærfað*, see Brunner (1965: §113A3), and Li *farma* ‘meal’, which is to be derived from **farm-*, see Luick (1914–40: §136A3).

² Note also LdGl 236 *acurna*, but this is best seen as due to scribal error.

³ I can find no trace of EWS *worc* mentioned by Luick (1914–40: §266.2) and Campbell (1959: §321n2). If the form is a ghost form, then presumably LWS *worc* is to be treated under the later development to *wur-*, see §§5.183–7. Note, however, Bo *wyrc* and Beo 289, 1100 *worc*, although the two instances in Beo may be due to the influence of *worda*, *wordum* in the set phrase. EWS *worþig* ‘enclosure’, found once in CP(H) alongside CP(C) *weorþig*, may well represent an alternative original form with *o*, see Brunner (1965: §113A1).

5.31 In Angl and Kt in the sequence /wirC/ where C is [-back], /i/ is retracted to /u/. The only example without subsequent *i*-umlaut is EpGl, ErfGl 1047, CorpGl 2008 *sin(h)uurful* ‘round’.¹ When /i, j/ stands in the next syllable /u/ is umlauted to /y/ and in Angl ⟨y⟩ spellings are almost exceptionless, such as *wyrþ* ‘honour’, *wyrþe* ‘worthy’, *ymbhwyrft* ‘circuit’.^{2,3} In Kt *e* < earlier *y* is found, for example, CollGl 49 *forhwerfede* ‘perverted’, *werðnes* ‘dignity’, see §5.194.⁴ The LWS ⟨y⟩ spellings are ambiguous, as in *wyrs* ‘worse’, since they could derive from the *i*-umlaut of either /u/ by combinative breaking or /iō/ by simple breaking. However, in EWS CP has a remarkable number of ⟨ie⟩ spellings, which suggests that diphthongization occurred rather than retraction, even though other EWS texts show much less frequent use of ⟨ie⟩.⁵ Thus, except for the example cited in §5.28n1, combinative breaking is restricted to nWS. Examples in Angl of failure of combinative breaking in smoothing environments are: Ps(A) *wircan* ‘work’, LorGl 2.21 *swiran* ‘neck’ acc.sg. < **swirhjo*.

¹ Note also BlHom *sinhwyrfel* with *i*-umlaut due to the suffix *-il*.

² It is probable that in BDS 1 *uuirthit* ‘he becomes’, ⟨-iu-⟩ is a replacement for ⟨-ui-⟩ in order to avoid the sequence **uuirthit*, as suggested by Smith (1933: §8c). ⟨ui⟩ is, of course, an alternative for ⟨y⟩, see §2.18. BDS 5 *uweorthae* ‘become’ pr.subj. unambiguously shows a diphthong, which is most probably due to analogy with verbs of the same class without initial /w/, such as *steorfan*, see Campbell (1959: §149n3). There is no need, however, to demand, as Campbell does, that the same analogy should extend to *uuirthit*, since diphthongization fails before a following /i/ in Angl, see §5.24.

³ But one exception is EpGl, ErfGl 990 *georuierdid* ‘disgraced’, against CorpGl 2042 *georwyrde*, see §5.24n6 for similar forms.

⁴ Ps 50, Bo *aferran* ‘remove’ may suggest that originally in Kt retraction occurred after labial consonants other than /w/, see also §5.30n1.

⁵ Thus for *wyrs* and derivatives CP has 5 instances of ⟨i⟩, 16 of ⟨ie⟩ and 19 of ⟨y⟩. But in other EWS texts ⟨ie⟩ spellings are infrequent: Oros *wierþe*, Chron 716 *arwierþa*.

(c) *Summary*

5.32 Breaking has a number of morphological consequences, the principal of which are as follows.

- (1) The present of strong class III verbs such as *steorfan* 'die' shows a breaking diphthong as opposed to the monophthongs shown by the other principal types, namely *helpan* 'help', *bindan* 'bind'. Similarly, in the preterite singular both the *steorfan* and the *helpan* types show breaking diphthongs,¹ as in *stearf*, *healp*, against the monophthong of *band*. The contrast is, of course, obscured by the influence of the following nasal in the *bindan* type, which caused a differential development in the Gmc period.
- (2) A number of strong verbs of different classes originally showed /x/ medially after the root vowel in the present and finally in the preterite singular. This /x/ was lost during the prehistoric period, see §§7.45–51, but the effects of breaking are clear. A single example from each class having such forms is: I – *wrēon* 'cover'; II – *flēon* 'flee'; V – *sēon*, *seah* 'see'; *flēan* 'flay'. It is only in class V that breaking affects the preterite singular.
- (3) Those weak class 1 verbs with root-final /l/ and a syncopated preterite, such as *syllan* 'give', show breaking in the preterite, for example, *sealde*. Of course in the *a*-dialects, see §5.15, we find *salde*, etc.
- (4) In *wa*- and *wō*-stem nouns such as *bearu* 'grove', *searu* 'device', the diphthong in the nom.acc.sg. is analogically introduced from inflected forms where breaking regularly occurs before /rwl/, see §5.22n3 for the situation with root vowel */e/.

Many recent morphological analyses of OE have assumed that breaking was synchronically relevant for historic OE, but this assumption has never been adequately proven, and it seems reasonable to suppose that breaking had at best a minor, peripheral role in the synchronic phonology of historic OE. Note especially that breaking is opaque in the sense that there are a number of forms in OE which at the level of surface phonetics meet the structural description for breaking, such as *ærn* 'house', *bærn* 'burn!'

¹ Of course *healp* occurs only in *ea*-dialects. Elsewhere we find *halp*.

5.33 It is clear that breaking must be a later change than first fronting, since the product of first fronting undergoes breaking, as in **sah* > **sæh* > *seah* 'he saw'. Similarly, breaking must precede *i*-umlaut, since the diphthong due to breaking is subsequently umlauted, as in **heardjan* > EWS *hi(e)rdan*, LWS *hyrdan*, nWS *herdan* 'make hard'. More difficult is the relative chronology of breaking and restoration of *a*, for which see §5.38.

5.34 In the Angl dialects there is a change of *o* > *a* before covered *l* or *r* which, because of the environment in which it takes place, is often associated with breaking, although the relationship is unclear. Examples of the change are: CorpGl 567 *ġewarht*, RuneMortain 1 *ġewarahtæ* ‘worked’, Ps(A) *marġen*, *marne* ‘morning’, Li, Ru1 *sc(e)alde* ‘should’, Ps(A), Ru1, Ru2, LiGl, DurRitGl, RuthCr *walde*, *nalde* and forms, LiGl, Ru2 *darste* ‘dared’, ErfGl 180 *dualma* ‘confusion’ (?).¹ The twelfth-century Merc LS 3 (Chad) shows that the change persists with *warhte*, *marġene*, *walde*. Outside the Angl area the change is rarely seen, but WSHGl and WSRGl, from the SE borders of Merc, both have *marġen*. Note also Oros 114.10 *warhte* and CP(C) 443.11 *walde*. Given the phonetic environment of the change, which, as can be seen from the above examples, mostly involves a preceding labial, it is more probable that the primary change is one of lowering rather than, as is usually asserted, unrounding, for that involves an unconvincing claim of dissimilation, as in Pheifer (1974: §62). A good discussion of this change and its spread is to be found in Vleeskruyer (1953: §22), and for other views see Brunner (1965: §59A1).

¹ Possibly also in ErfGl 198 *suarnadun*, cf. EpGl *suornadun*, but the forms are obscure.

III Restoration of \ddot{a}

(a) Restoration of \check{a}

5.35 A further sound change which occurs early in the prehistoric period, see §5.38 for the precise chronology, is that by which $*/\check{a}/ < */a/$ by first fronting reverts to $/a/$ in open syllables when a back vowel stands in the next syllable.¹ The change also occurs, although in a more restricted manner, both when a geminate consonant intervenes and when the intervening consonant group is either $/st/$ or $/sk/$.² In parallel fashion the long vowel $/\check{a}:/$ is also retracted to $/a: /$, but for discussion of this much more limited change see §§5.39–40. Bearing in mind that the degree of implementation of the change is variable, the following approximate formulation may be useful (see, however, footnote 2 below):

$$\left[\begin{array}{c} \text{V} \\ +\text{low} \end{array} \right] > [+back] / \text{ ______ } C_1 (C_1) \left[\begin{array}{c} \text{V} \\ +\text{back} \end{array} \right]$$

¹ As explained in 5.15, in the so-called *a*-dialects where there is failure of first fronting before [t], forms such as *-wala*, *-falud*, etc. are to be explained by that failure rather than restoration of *a*.

² Apparently the change does not occur before $/sp/$, hence we find *æspan*, *æpsan* ‘aspens’ infl., *hæpsian* ‘hasp’, with or, less commonly, without metathesis. This exception

is phonologically odd, for it is reasonable to suppose that /st, sk/ are being treated as realizations of a single C slot, see §2.83(1), and /sp/ would normally be treated likewise. In the approximate formulation below it is silently assumed that /st, sk/ are indeed so treated. The same, of course, would not apply to /ft/, and the traditional view that restoration also occurs before /ft/ seems to be borne out only by AntGl 1249 *saftriende* ‘rheumy’ and Rune 4 *aft* ‘after’, in neither of which much reliance can be placed.

5.36 Restoration of *a* is extremely frequent in open syllables and the following examples show the change with each possible intervocalic consonant with the exception of /x/, for which see §5.38: *stapol* ‘pillar’, *gafol* ‘tax’, *latost* ‘latest’, *sadol* ‘saddle’, *bapian* ‘wash’ (< **bapōjan*), *bacan* ‘bake’, *gnagan* ‘gnaw’, *hasu* ‘grey’, *calan* ‘be cold’,¹ *faran* ‘go’. Examples are lacking with /b/, see §2.53 and n1, cf. §5.39n2, and by §§5.3–6, 10 there could be no such change before nasals. Failures of the change or its extension beyond normal limits are to be explained on non-phonological grounds, see §5.37. Examples of the change with an intervocalic geminate are not frequent, and it should be noted that if such a geminate is due to WGmc gemination then there will be no restoration of *a* because of the immediately following /j/, for example, *sec̄gas* ‘men’ < **sæggjas*. Examples with invariant *a* are: *cassoc* ‘rough grass’, *hassuc* ‘rough grass’, *mattoç* ‘mattock’,² *crabba* ‘crab’, *racca* ‘cord’. *Hnappian*, *hnæppian* ‘fall asleep’ are about equally frequent, whilst *læppa* ‘skirt’ is more frequent than *lappa*. Finally, *cæppe* ‘cap’, *tæppa* ‘tap’, *tæppian* ‘tap’, *tæppa* ‘tape’, *hættian* ‘skin the head’ apparently never show restoration of *a*.³ The change is exemplified before /sk, st/ by *waxan* ‘wash’ (< **waskan* by metathesis, see §7.96), *ascan* ‘ashes’, *flaskan*, *flaxan* ‘flasks’, *brastlian* ‘crackle’ (< **brastulōjan*).⁴

¹ But *calan* is an example of restoration of *a* only in the *ea*-dialects, see §5.15.

² EpGl 878, CorpGl 1709 *mettoças* may be due to variation of the unstressed vowel, cf. ErfGl *metticas*.

³ It is doubtful that the apparent tendency for restoration of *a* to fail more frequently before /pp/ than any other geminate is any more than accidental.

⁴ Examples before other consonant groups are extremely rare. WS *appla* ‘apples’ could be due to the influence of *apuldre* ‘apple tree’, and it is possible that Angl *accras*, etc. ‘fields’ is due to foreign influence. Note also the single example CP 293.4 *watode* ‘he watered’, alongside frequent *wat(e)rian* and infl. forms.

5.37 Unsurprisingly this change has many morphophonemic implications, and the principal types of morphophonemic alternations, together with analogical reformations, are discussed below.

- (1) In masculine and neuter *a*-nouns unrestored *æ* is found in the singular, restored *a* in the plural, as would be expected phonologically. Hence we find *dæg* ‘day’, *fæt* ‘vessel’ against *dagas* ‘days’, *fatu* ‘vessels’. When only a single consonant intervenes there is very little analogical extension;

examples such as Nbr *tal* 'tale' are to be explained under 5.15n7. Sporadic extension of both *a* and *æ* can, however, be observed. Examples are: Oros 15.16 *hwales* 'whale' gen.sg., 14.31 *hors(c)hwælum* 'walrus' dat.pl., ÆGram 25.1, Ex 487 *pað* 'path', And 533 *wædu* 'waters' nom.pl. When a geminate intervenes there is a strong tendency to extend *æ* throughout the paradigm, as in: *gnættas* 'gnats', *hættas* 'hats', *hnæppas* 'cups'. Note, however, both *prattas* and *prættas* 'bowls', and in *sacc* 'sack' we may possibly have *a* extended to the singular, see n1 below, alongside less frequent *æ* (in both singular and plural). A few words show only *a*: *batt* 'bat', *bratt* 'cloak', *catt* 'cat', *facg* 'flatfish', *prass* 'pomp'.¹ With intervocalic /s/ or /sk/ *æ* is frequently extended to the plural, as in *æsca*, *æscum* 'spears', see (3) below.²

- (2) In adjectives of the same declension, and the feminine forms of the same adjectives, there is considerable analogical reformation, so that *æ* is regular in closed syllables, *a* regular in open syllables. Hence we find *hwæt* 'active' masc.nom.sg. but *hwate* masc.nom.pl. But with most such adjectives *æ* may be extended to open syllables, and this is especially common with *hræd* 'swift', *stræc* 'severe', for example, *hrædum*, *stræcum*.
- (3) In feminine nouns of the *ō*-declension, such as *faru* 'journey', *æ* would be phonologically expected in the sing. except nom.sg., and in the nom.acc.gen.pl. when the inflexion is *-e* or *-ena*. However, *a* is analogically extended from the nom.sg. to all forms with great regularity and hence we find *fare* acc.sg., etc. In early texts especially there is occasional preservation of *æ*, as in BDS 1, LRid 13 *-faerae*, CP 115.5 *wræce* 'pain', Beo 154 *sæce* 'strife'. Extension of *æ* may be found in poetical *cearu* 'care', also found in EWS, but it may be that the form shows the adoption of *ċear-* from inflected forms such as *ċeare*. No fully satisfactory explanation has been given for the form, see Brunner (1965: §108A4).
- (4) *N*-declension feminine (and, theoretically, since examples are lacking, neuter) nouns should have *æ* in the nom.sg., *a* elsewhere, but *a* is regularly extended to the nom.sg., hence *fape* 'aunt'. No doubt this extension was promoted by the frequent use of the inflexion *-u* from the *ō*-declension, for example, *fapu*.³ The contrast between levelling of *æ* here and extension of *æ* in the masc. *a*-declension, well exemplified by *ascē* ~ *æscan* v. *æsc* ~ *æscas*, is particularly noticeable.
- (5) In strong class VI verbs of the *faran*-type, there should be variation between *a* and *æ* in the present tense and past participle according to the inflexion. In WS, however, *a* is generalized throughout the present and in the 2,3sg.pr.ind. it is later subject to *i*-umlaut. Hence we find *fare* 'I go', *færþ* 'he goes'. In EWS there is some variation between *a* and *æ* in the past participle, such as *-faren*, *-færen*, but in LWS *a* is

general. In Angl, however, esp. Nbr, there is a strong tendency in the opposite direction, and *a* is often levelled away in the present and past part., esp. the pr.sg., for example, Li, Ru2 *færo* 'I go'.

It should be clear that in the synchronic morphophonology of historic OE the distribution of /æ/ and /a/ has been subject to considerable analogical reformation and cannot be predicted merely on grounds of phonological environment. Hence minimal pairs such as *fære* 'journey' masc.dat.sg. and *fare* 'journey' fem.dat.sg. are not infrequent, cf. above. It would therefore seem necessary to postulate both /æ/ and /a/ in the phonemic system.⁴ But there may have been some synchronic reflex of the historical change, to deal with the alternation of vowel in *a*-declension nouns and the different alternations in adjectives. Clearly, however, the same rule could not apply to both categories.⁵

¹ Of these words it may be useful to note that *batt* and *bratt* appear to be OIr loans and that *facg* and *prass* are of unknown etymology. *Catt* and *sacc*, cf. above, may be from older **cattu*, **saccu*, cf. Lat *cattus*, *saccus*, but for *catt* cf. also *catte* and §5.37.4 below.

² Examples of such analogy with intervening /st/ are lacking.

³ Note ÆGl *spædu* 'spade'.

⁴ For an alternative view see Colman (1983a), also Ross (1951) and n5 below.

⁵ Cf. Ross (1951) for an account which attempts to dispense with much of the analogical explanation. Drescher (1980) claims that restoration of *a* was lost in Merc and that this is the origin of second fronting, see §§5.87ff., esp. §5.92n3. That analysis depends upon a theory of rule loss particular to generative phonology.

5.38 Although the chronology of restoration of *a* poses some difficulty, it is certain that the change was prior to the palatalization of velar consonants (§§7.15ff.), since velar consonants remain before restored *a* but are palatalized before *æ*, hence *calan* 'cool', *gān* 'go'. For S. (WS, Kt) dialects proof that restoration of *a* was a genuine sound change and that it occurred some time after the period of breaking is provided by *slēan* 'slay' and forms, where restoration of *a* took place before intervocalic /x/ which is later weakened to /h/ and then lost, see §§7.45–51. Since *slēan* is from Gmc **slaxan*, the only sequence of changes which will give the attested forms is the following, where there is no restoration of *a*: **slaxan* > **slæxan* > **slæaxan* > **slæahan* > **slæa-an* > *slēan* = (slēan). If restoration of *a* had been earlier than breaking (or not a genuine change at all but rather an orthographic reflection of a further restriction on first fronting), then the sequence of changes would have been: **slaxan* > **slæxan* > **slaxan* (restoration of *a*) > **slaxan* (failure of breaking) > **slahan* > **slā-an* > *slān*. Since forms such as *slān* are not found in WS, Kt¹ this demonstrates that restoration of *a* was in S. dialects a genuine sound change occurring after breaking. Further proof is provided by parallel examples with intervocalic /ll, rr/,

although here the position is less certain because of the limited nature of restoration of *a* before geminates. But the presence in WS and Kt only of forms such as *pearruc* ‘enclosure’ < **parruk-* and *gealla* ‘gall’ < **galla* confirms the chronology. In Nbr, on the other hand, the latter two types might have /a/ under either chronology, as in Li *gesparrado* ‘I bolted’, Ru2 *falla* ‘fall’, see §5.29 and n3. However, for WS *slēan* we find Nbr *slā*, etc., and this strongly suggests that in Nbr restoration of *a* was earlier than breaking.² Also in Nbr there are forms with /æ:/, such as *slæ*, and these can easily be explained as the analogical extension of /æ:/: from forms without a following back vowel, for example, *slǣs* ‘thou slayest’ < **slaxis*. In Merc the position is less clear. The early glossaries have a few forms which suggest early restoration of *a*, of which the clearest is CorpGl 1576 *slahae*; on the other hand we find EpGl, ErfGl 224 *pearroc*, CorpGl 486 *pearuc* and similar forms, see further §5.31. Ru1 has both *slān* and *slēan*, where the ⟨ēa⟩ spellings could be explained as typical of the WS influence on the text. In Ps(A) we find *slēa* ‘I slay’, but this form could in that dialect be from either chronology and is hence unhelpful. On the other hand, Ps(A) *fearras* ‘bulls’ suggests that restoration of *a* was here later than breaking. The evidence as a whole, therefore,³ suggests that restoration of *a* did not occur over the whole country simultaneously, but that it began firstly in the North-East before the time of breaking and then spread southwards to reach areas such as West Mercia, Wessex and Kent at a time after the period of breaking. It is probably impossible to ascertain the relative chronology of breaking and restoration of *a* in other areas of Mercia, where the changes may even have been contemporaneous.

¹ The one exception being CollGl 49.827 *ofslānne* ‘slay’ infl.inf., which could be analogical according to n2 below or a scribal error.

² The traditional explanation, that restoration of *a* was later than breaking even in Nbr, must explain *slā*, etc. as analogical formations based on the *faran*-type; so, for example Campbell (1959: §145n2). But if the process were analogical one might expect a few unlevelled forms, which do not exist. Contrast here Li *færenne*, *færa* beside more frequent *fara*.

³ The one counter-example is common OE *ēa* ‘river’, never ***ā*. But *ēa* could be from inflected forms, as is clearly true of Li *ēa* ‘rivers’. See too Girvan (1931: §54a1).

(b) Restoration of *ā*

5.39 In WS only¹ there is some evidence to suggest that /æ:/: was similarly retracted to /a:/: when a back vowel followed in the next syllable. The change was undoubtedly more restricted than restoration of *a*, and most examples of the change are paralleled by examples with unrestored /æ:/:. The change only occurs before a single intervocalic consonant, and apparent examples show only intervening /k, ɣ, l, r, p/ as that consonant.² Examples

in EWS are: *lācnian* (< **lācunōjan*) ‘tend’, *māgum* ‘kinsmen’ dat.pl., *slāpan* ‘sleep’, *slāpian* ‘sleep’, *swārmōdness* ‘dullness’,³ *wārum* ‘agreement’. But these forms usually exist alongside more frequent forms with *æ*, for example, *lācnian*, *māgum*, *slāpan*, *slāpian*. In later WS texts *ā* is rather more frequent, not only in the above words but in others such as *ācumba* ‘oakum’,⁴ *hrāca* ‘spittle’, *ġestālum* ‘accusation’ dat. pi. (hence *ġestāl*, etc.), *tāla* ‘slanders’ (hence *tāl*, etc.). It is especially important to note the pret.pl. of the strong class V verb *licġan* ‘lie’, where *lāgon* is more common than *lægon*. Also to be found are *wāgon* ‘they weighed’, *þāgon* ‘they partook’, alongside *wægon*, *þægon*.

¹ This, of course, follows from the fact that /æ:/ had already been raised in nWS to /e:/, see §3.25. The sole exceptions are: Ru1 *ġesāgun* ‘they saw’, 3× alongside more frequent *ġesēgun*, *ġesægun*, cf. *lāgon*, below, Ru1 *iāra* ‘formerly’, and CorpGl *ġestālum* ‘objection’ dat.pl. All three might be taken as examples of WS influence in these texts. CollGl 49.368 *māgos* ‘kinsmen’ could equally be due to WS influence on a lKt text and is in any case scarcely reliable.

² Thus the intervening consonant is either a velar, a liquid, or /p/. A more general statement may be possible, even allowing for the doubtful status of the liquids, see §§2.73–4, which is that restoration of *ā* was most probable if the intervening consonant was [+back], which could in unclear circumstances be extended to [+grave], although the absence of the change with intervocalic /f/ should be noted.

³ From inflected forms of *swār*, such as *swārum*.

⁴ But this example may be due to confusion of the prefix, as suggested by Girvan (1931: §35.3) and Campbell (1959: §162n2).

5.40 The status of restoration of *ā* is rather uncertain, for the change is not carried out with great regularity in either EWS or LWS, and although the change is more frequent in the latter, there are still doublets with /æ:/ for all the examples in §5.39 except plural forms of *māgas* ‘kinsmen’ and *hrāca*, *ġestāl*.¹ No doubt /a:/ was frequently levelled away under analogical pressure, but the frequency of ⟨æ⟩-spellings strongly suggests that the change was never wholly implemented. This applies most obviously to restoration of *ā* with an intervening labial, see §5.39n2. On the other hand, it should be noted that analogical extension of /a:/ is even more frequent than analogical extension of /a/, for which see §5.37. Hence forms such as *ġestāl*, *tāl*, *swār*, quoted above, should be equated with sporadic *paþ* (5.37n1), nonexistent ***hwat* (5.37(2)). The levelling out of /a:/, on the other hand, is most notable in strong class IV verbs, such as *bæron* ‘they bore’, in which class /a:/ is never found (except before nasals), and in many strong class V verbs, such as *spræcon* ‘they spoke’ and, most notably, *wæron* ‘they were’. The use of analogy to explain the unexpected distribution of /æ:/ and /a:/ is rather unsatisfactory and has never been resolved, see Kluge (1882).²

¹ But there are many other words with only /a:/, such as *māga* ‘son’, cf. *mæg* ‘kinsman’ where /a:/ is never extended into the singular.

² The chronology of restoration of *ā* cannot be determined in like manner to the chronology of the restoration of *a*, since crucial examples are lacking, but it seems reasonable to suppose that the changes were contemporaneous.

IV Lowering of second elements of diphthongs

5.41 As noted in §5.1, OE inherited from Gmc four diphthongs, namely */iu, eu, au, ai/. The last of these was monophthongized at a very early stage, see §§5.7–9, but the others remained, developing as prehistoric OE */iu, eu, æu/, for the last see §5.13. These original diphthongs were fed additional members by the breaking of the long front vowels, and they came to contrast with equivalent short diphthongs created by the breaking of the short front vowels, by which arose */iū, eū, æū/, see §5.16.¹ Some time after the period of the sound changes discussed already, see §5.46 for further discussion, the second element of all these diphthongs began to be lowered,² except in some Angl dialects when /w/ immediately followed, see below. This lowering was undoubtedly from /u/ to either /o/ or /a/ in the first instance, and the degree of lowering was in part a general reflection of the development of unstressed vowels,³ see §§6.46ff., 59ff., and in part dependent upon the height of the first element of the diphthong.⁴ There were somewhat different developments in the different OE dialects, and in §§5.42–5 we discuss those for WS, Kt, Nbr, and Merc separately. However, the majority of dialects show the shifts: */iu/ > /io/, */eu/ > /eo/, */æu/ > æa/ (= *ĕā*), and similarly for the short diphthongs,⁵ which set of changes we may characterize approximately as follows:

$$\left[\begin{array}{c} \text{V} \\ \text{—syll} \end{array} \right] > \left[\begin{array}{c} \text{—high} \\ \alpha\text{low} \end{array} \right] / \left[\begin{array}{c} \text{V} \\ \alpha\text{low} \end{array} \right] \text{_____}$$

¹ Occasional archaic spellings for diphthongs which are the result of back umlaut, see §§2.32–4, do not imply that the changes discussed here are later than back umlaut, although this may be in part true, see §5.46. Rather, they primarily show the equivalence of short diphthongs due to breaking and due to back umlaut.

² Traditionally this change has been regarded as one of unrounding, as in Luick (1964–40: §119), Campbell (1959: §§275–81), but there can be no doubt that the primary change was a lowering and that unrounding was secondary, see Brosnahan (1953: §66).

³ As would be expected under these circumstances, the second element was gradually reduced to some kind of centralized vowel, see §§2.30ff. and §2.43.

⁴ This leads Lass and Anderson (1975: 34–5) to call the change ‘Diphthong Height Harmony’, but since the heights of these diphthongs are not invariably equated this term is avoided here, cf. McLaughlin (1979).

⁵ This is not the final stage of development of the OE diphthongs, even leaving aside the shifts mentioned in n3 above, since, for example, in some dialects *īō* and *ēō* merge, see §§5.155–62.

5.42 In WS the second element of the prehistoric diphthongs is almost invariably¹ lowered to /o/ after a nonlow vowel and to /a/ after a low vowel. Examples for each case are:² **būun* > *bīon* ‘be’, **dēur* > *dēor* ‘animal’, **dæuþ* > *dēaþ* ‘death’; **liuht* > *līoht* ‘light’, **nēuh* > *nēah* ‘near’; **mīux* > *miox* ‘manure’, **feuh* > *feoh* ‘cattle’, **sæuh* > *seah* ‘saw’. The same developments take place before /w/, cf. §5.44.

¹ The most significant exception is Chron(A) 530 *feala* ‘many’, which reoccurs in ÆHom(P) XX alongside *fela* in other mss. and elsewhere in the same ms., for example, ÆHom(P) XVIII.290 *fela*. The form is due to *a*-umlaut, which is unexpected here, see further §5.105(1) and n1 and cf. also §5.41n1. CP *þeawas* ‘servants’ is a further isolated example. See also §6.11.

² Examples are given in three categories: (1) original Gmc diphthongs; (2) long diphthongs by breaking; (3) short diphthongs by breaking or back umlaut. Examples are given in descending order of height and where examples are wanting this is indicated by omission. Other changes are ignored.

5.43 In Kt the position is obscured by later modifications of the OE diphthongs during the historic period, see §5.160, but there is a sufficiency of forms in eighth- and early ninth-century charters to indicate that the prehistoric development was parallel to that in WS. Examples are as follows (often alongside forms showing the later modifications): **būun* > Ch 1188 *bīon* ‘be’, **bebēude* > Ch 1188 *bebēode* ‘I request’, **hæuhhām* > Ch 31 *hēabhām* (place-name);¹ **nēuhor* > Ch 1200 *nēor* ‘nearer’; **niumanne* > Ch 1482 *niomanne* ‘take’ infl.inf., **geweurþiæ* > Ch 1188 *geweorðiæ* ‘honour’ pr.subj., **wæulh-* > Ch 31 *wealh-* ‘foreigner’ (in place-name).²

¹ Note even earlier Ch 23 *āēanberhti* (personal name).

² The development before /w/ seems not to be evidenced in such texts.

5.44 In Nbr the lowering of the second element is rather different and more complex than elsewhere, and furthermore a distinction has to be drawn between the position in Ru2 (‘South Northumbrian’ = SNbr) and the other (‘North Northumbrian’ = NNbr) texts. The position in SNbr is discussed under (1) below; the position in NNbr under (2).¹

- (1) The dialect of Ru2 diverges from WS, Kt in that the reflexes of */æu, æu/ of whatever origin are more often spelled ⟨ēo⟩ than ⟨ēa⟩, the ratio in the case of the long diphthong being approximately 3:1, and in the case of the short diphthong 6:1 (Lindelöf, 1901: §§33, 48). Similarly, we find for the reflexes of */eu, ēu/ both ⟨ēo⟩ and ⟨ēa⟩, in the ratio 6:1 for the long diphthong, 8:1 for the short diphthong. On the other hand, the reflexes of */iu, iū/ are always spelled ⟨īo⟩. It is clear, therefore, that ⟨ēo⟩ and ⟨ēa⟩ are equivalent spellings in this dialect,² and from this it must be assumed that the second element was lowered

only to a mid vowel, regardless of the height of the first element. It is unlikely that the first elements of these diphthongs were also equated, giving a merger of the diphthongs phonologically as well as orthographically, see Campbell (1959: §278n3), Brunner (1965: §35A1), but see also further below. Examples of the various types are: **onsiun* > *onsion* ‘face’, **bēud* > *bēod* ‘table (2× alongside *bēadum* 1×), **bāud* > *bēod* ‘commanded’ (11× alongside *bēad* 4×); **bitwīuhon* > *bitwion* ‘between’, **nēuhlicīga* > *nēolicīga* ‘approach’ (36× alongside *genēalocade* 1×);³ **iursīga* > *iorsīga* ‘grow angry’, **feurr* > *feor* ‘far’ (10× alongside *fear* 12×, cf. §5.30n1), **gæurd* > *geord* ‘enclosure’ (81 × alongside *geard* 15×). Before /w/ there is very little trace of the retention of /u/ common in the other Nbr texts (see below), and thus we find *iowih* ‘you’, etc. for /iu/, *hrēownisse*, etc. ‘repentance’ against rare *hrēunisse*,⁴ and so too with *oncnēow* ‘he knew’, both for /eo/.

- (2) In contrast to Ru2 the NNbr texts Li and DurRitGl show predominantly ⟨ea⟩ for the reflexes of */eu, eū, æu, æul/ and ⟨eo⟩ spellings are rare. But as in Ru2 the two spellings were equivalent and there was consequent confusion of the two, see examples below. It would appear, therefore, that in NNbr the second element of the OE diphthongs was lowered to /a/ provided that the first element was [-high].⁵ Examples from the two texts are: **onsiun* > *onsion* ‘face’, **pēude* > *pēade* ‘nation’ (alongside *pēod*), **lāufa* > *lēafa* ‘faith’, cf. *lēaf*, *lēof* ‘beloved’ and *bibēod* ‘requested’;⁶ **nēuhlēca* > *nēolēca* ‘approach’; **iurre* > *iorre* ‘anger’, **heurte* > *hearte* ‘heart’ (alongside *heorte*), **hæurd* > *heard* ‘hard’.⁷ In these texts /u/ frequently remains unlowered before /w/ if the first element is nonlow, and thus we find ⟨iūw, ēow⟩ spellings.⁸ Such spellings can then be simplified to ⟨iūw, ēw⟩ or ⟨iū, ēu⟩. Typical examples are: *iwer*, *iuer* ‘your’, *hrēunisse* ‘repentance’.⁹ Both NNbr and SNbr texts show rare ⟨æw⟩ forms for */euw/, such as Li *hrāwende* ‘repenting’, DurRitGl *gīflæue* ‘flow’ pret.subj., Ru2 *sāwe* ‘sowed’, which are usually regarded as scribal errors (Luick, 1914–40: §128A), although Rydland (1977), on the basis of some occasional modern dialect forms, suggests that there may have been a regular alternative development with lowering of /e/.

¹ There are few significant forms in the eNbr texts, but the following should be noted. BDS 5 *dēoth-* ‘death’ is more probably an archaic spelling (= **dæoth-*) than an indication of SNbr ⟨ēo⟩ for ⟨ēa⟩; RuthCr *heafunæs*, *fearran*, *bibeald* are ambiguous, since the rune may either show lowering of the second element as in NNbr or may indicate no more than a diphthongal pronunciation, see Girvan (1931: §42a2), Page (1961). Other spellings in these texts or in Bede and LVD are merely archaic, see §§2.32–4 for examples.

² See Lindelöf (1901: §33) and Campbell (1959: §278(c)n3). Note that if Ru2 *sceal* ‘shall’, *sceattas* ‘treasurers’, *sceacrum* ‘robbers’ dat.pl. show palatal diphthongization of

/æ/, then the consequent diphthong is always spelled ⟨ea⟩. But these forms are difficult, see further §5.51 and n3.

³ And once *ginoelicade* with ⟨oe⟩ for ⟨ēo⟩.

⁴ On ⟨ēu⟩ for ⟨ēow⟩ see below.

⁵ But exceptionally Li regularly has *bihianda* ‘behind’ against *bihionda* (1×).

⁶ ⟨ēo⟩ spellings are more frequent in LiGl than DurRitGl, which only has *ēostorlic* ‘Easter’ adj. (13×) and *ēore* ‘ear’ (1×).

⁷ The only ⟨eo⟩ spellings I have noted are DurRitGl *beorno* ‘sons’ and *eornungum* ‘merit’ dat.pl.

⁸ There are occasional ⟨ēaw⟩ spellings which may have the same significance as the ⟨āw⟩ spellings discussed below, such as *brēawnisse* ‘repentance’. Note that the forms are not restricted to strong class VII verbs.

⁹ Some support for this failure of lowering may be found in the especially frequent use of ⟨eo⟩ for the back umlaut of *e* with following *u* or *o*, for example, *feolo* ‘many’, *sefo* ‘seven’. But it is difficult to know how much weight to attach to these forms.

5.45 In Merc the normal development seems to be similar to that in WS, and hence we find examples such as (taken from Ps(A)): **būm* > *bīom* ‘I am’, **lēufa* > *lēofa* ‘beloved’, **gēlāufa* > *gēlēafa* ‘beloved’; **nēuhlācan* > *nēolācan* ‘approach’; **iurre* > *eorre* ‘angry’, **eurþe* > *eorþe* ‘earth’, **æurm* > *earm* ‘arm’. Ps(A) especially, however, has a number of forms with ⟨ēā⟩ for ⟨ēō⟩, such as *nēasade* ‘drew near’, *ðēada* ‘nation’ gen.pl., *earðe* ‘earth’, *wearðiað* ‘honour’ imp.pl. Such forms are rare in Ru1, for example, *hrēad* ‘reed’, *wearp* ‘threw’, and in the early glossaries only EpGl, ErfGl have such spellings and there only for ⟨ēo⟩: *uuēadhōc* ‘hoe’ and two or three others. In Ps(A) the use of ⟨ēā⟩ for ⟨ēō⟩ gives rise to forms with ⟨ēō⟩ for ⟨ēā⟩: *dēode* ‘dead’ acc.pl., *hēofud* ‘head’, *beorn* ‘children’, *feodrum* ‘father’ dat.pl.¹ The later Merc merger of *īo* and *ēo*, see §5.158, causes further confusion, with new ⟨ēā⟩ spellings for earlier ⟨īo⟩ arising: *astēapte* ‘deprived’, *ðēastrum* ‘darkness’ dat.pl.,² *earre* ‘anger’, *ondwleatan* ‘face’ dat.sg.³ A fuller list of the various forms can be found in Campbell (1959: §§275–6, 281).⁴ Before /w/ both Ps(A) and Ru1 have a minority of forms which suggest retention of /u/ as in NNbr. Examples are: Ps(A) *oncnēw* ‘knew’, *trēw* ‘tree’, *gētrēwlice* ‘faithfully’, HyGl 4 *ðīwgen* ‘serve’ pr.subj.pl. (for **ðēwgen*), Ru1 *īu* ‘you’, *gētrē(u)we* ‘true’, *hrē(u)(w)nisse* ‘repentance’, *cnēuris* ‘generation’. The few such forms in EpGl, ErfGl, for which see Pheifer (1974: §41), may well be no more than archaisms, since the early glossaries have such spellings in other words too.⁵

¹ Campbell (1959: §§275–6) sees these ⟨ēō⟩ spellings in Ps(A) as archaic or conservative forms. But their relative frequency in the text suggests that this explanation is unlikely. On the other hand, ErfGl 411, CorpGl 877 *beosu* ‘purple’, CorpGl 400 *weorras* ‘calluses’ (cf. §5.29), 545 *seorwum* ‘devices’ dat.pl. are much more probably archaisms.

² The reading is uncertain, see Sweet (1885: 312).

³ If these forms are not due to confusion of ⟨ēo⟩ and ⟨ĕā⟩, then *īo* and *ĕo* must have merged prior to the lowering of the second element. But this is unlikely given the probable chronology, see §5.46.

⁴ Note especially Ps(A) *weagas* ‘ways’ (3×) alongside normal *wegas* and, once only, *weogum* dat.pl. For an alternative explanation, from Kt scribal influence, of this and other ⟨ea⟩ spellings see Ball (1970: 465).

⁵ For archaic spellings see §§2.32–4 and also n1 above.

5.46 The chronology of the above changes is rather uncertain. Since archaic spellings such as Rune 48 *bæurnæ* ‘son’ dat.sg. seem to show that the epenthetic vowel due to breaking was originally /u/ and that the diphthongs from breaking became identical to, or the short counterparts of, the original Gmc diphthongs, it is fair to suppose that the above changes occurred after the time of breaking. Unfortunately this argument is not entirely flawless since archaic spellings can also be found for the product of back umlaut, such as CollGl 12 *eutende* ‘eating’, but such forms are exceedingly rare and may be quasi-archaic, see §5.41n1. Even where archaic spellings of these diphthongs occur, they are relatively infrequent (being commonest in spellings of personal and place-names where archaisms might be expected and are of uncertain significance). This makes it highly probable that the change was well under way before the time of the earliest texts.¹ Consequently the major problem is whether the changes took place before or after the period of palatal diphthongization and *i*-umlaut, the two major changes which were later than breaking and restoration of *a* but also fully completed by the time of the earliest texts. The most probable suggestion is that of Luick (1914–40: §291), that the lowering was a gradual process which began before these changes but which may not have been complete by the time that they were over. Yet the use of ⟨ĕā⟩ both for the lowering of */æu, æu/ and the palatal diphthongization of */æ(:)/, even in ninth-century charters such as Ch 264² (*h*)*adheldġeate*, *healh*, or LRid 10 *ġeatum* ‘ornamentally’, 8 *sġeal* ‘shall’ against the breaking diphthong in CædH(M) 7 *-ġeard*, could imply that the lowering was relatively early, since the forms from palatal diphthongization prove that ⟨ĕā⟩ was a spelling for a diphthong with a fully lowered second element, see §5.49.³ Forms such as Ps(A) *earre* ‘anger’ are due to scribal confusion or Kt influence, see §5.45 and n4, and do not prove a late date for the lowering. Yet the lowering we have discussed here is eventually accompanied by a reduction of the vowel, which is observable as a process during the historic period, see §6.62.

¹ For an alternative view see Campbell (1959: §275). In a synchronic context Lass and Anderson (1975: 125–9) order lowering (= Diphthong Height Harmony, §5.41n4) after *i*-umlaut, but McLaughlin (1979) argues the reverse. It should be noted, however, that there is scarcely any evidence for a synchronic reflex of the lowering, which plays no role in the morphophonology of historic OE.

² A later, ninth-century, copy of the original 778 charter.

³ Not so, apparently, Campbell (1959: §276).

V Palatal diphthongization

5.47 The changes discussed in I–III above are recognizable as both phonologically and chronologically homogeneous, whereas those discussed in IV provide a bridge between those earliest changes and those to be discussed below. From the phonological point of view the earliest changes are concerned with either original Gmc low vowels or with various velarization processes; the changes to be discussed in the next few sections, on the other hand, are mainly related to fronting processes, the major exception to this being back umlaut, see §§5.103ff.

5.48 What are probably the earliest amongst this second group of changes are those caused by the influence of preceding palatal consonants on stressed vowels,¹ generally subsumed under the title of palatal diphthongization. It is extremely important to note that there were three different types of palatal consonant in the language of the period, since the types do not share the same distributional patterns.² Type 1 consists of original Gmc palatals, that is, exclusively Gmc */j/ > OE /j/ as in *gēar* ‘year’; Type 2 consists of original Gmc velars which were unconditionally fronted before every stressed vowel, that is, Gmc */sk/ > OE /ʃ/, as in *scēap* ‘sheep’; Type 3 consists of original Gmc velars which were fronted before or after a stressed front vowel, that is, Gmc */ɣ/ > OE /j/, */k/ > OE /tʃ/, as in *gīfan* ‘give’, *ċeaf* ‘chaff’. In addition to the different types of palatal consonant, three different types of stressed vowel might be affected by palatal diphthongization: (1) ‘original’ front vowels, that is, vowels which were front in WGmc or became front by the operation of the various sound changes already discussed in this chapter; (2) umlauted front vowels, that is, vowels which only became front through the operation of *i*-umlaut; (3) back vowels. In each of these cases, for different reasons, the actual or alleged influence of preceding palatals is phonologically controversial or dubious, and therefore each type is discussed separately below.

¹ The traditional classification of the changes as due to the influence of initial palatals is somewhat misleading. All that is required is that the palatal must directly precede a stressed vowel, that is, the palatal should be initial in a stress foot. Thus *scēaft* ‘shaft’ and *gesċeaft* ‘creation’ both show diphthongization after /ʃ/, and the latter example has no diphthongization after /j/, since /e/ is unstressed and /j/ is not initial in a stress foot.

² For full details of /j/ < Gmc */j/ see §§4.6–9; for full details of the other palatals which are derived by the OE changes of palatalization and assibilation, see §§7.15–43.

(a) *Palatal diphthongization of original front vowels*

5.49 In the prehistoric period of OE, when the front vowels /æ(ɪ), e(ɪ)/ from Gmc **ǣ*, **ĕ* were preceded by a palatal consonant of any of the three

types described in §5.48, then these vowels came to be written as ⟨*ĕ*ā, *ĭ*ē) respectively.¹ The most commonly held view, very forcibly expressed as early as Bülbring (1900b), followed in essentials by Luick (1914–40: §168), Girvan (1931: §64), Campbell (1959: §§185, 188), Brunner (1965: §90), is that this orthographic change reflects a genuine diphthongization and that the diphthongs which were created became, sooner or later, identical to other diphthongs represented by ⟨*ĕ*ā, *ĭ*ē). There is some disagreement as to the original nature of the diphthongs, for Bülbring, Brunner, and Girvan hold that they were originally rising diphthongs which later became falling, whereas Luick considers the diphthongs originally to have had variable prominence with a later split into rising and falling diphthongs, and Campbell views them as being from the beginning falling diphthongs. A minority view, perhaps first seen in Dieter (1898) – against which see Bülbring (1900b) – and later in Daunt (1939), Stockwell and Barritt (1951) – against both of which see Kuhn and Quirk (1953) – Lass and Anderson (1975), and Colman (1985), regards the shift as no more than orthographic, with the ⟨*i*, *e*⟩ immediately following the palatals being purely diacritic, indicating the palatal nature of the consonant. There are four principal arguments in favour of the majority view.² Firstly, the later development of the sounds produced by this process is identical to that of breaking and other diphthongs represented by ⟨*ĕ*ā, *ĭ*ē). Thus just as *seah* ‘saw’ > *seh* and *hēah* ‘high’ > *hēh*, so too *ġeat* ‘gate’ > *get* and *ġēar* ‘year’ > *ġēr*. Therefore it seems sensible to suppose that the sounds produced by palatal diphthongization had fallen together with the other diphthongs during the OE period and before the later OE/ME monophthongizations. Secondly, in those texts where the orthographic changes are to be observed (see below for details), they are carried through with a regularity which is more likely to correlate with a phonological shift than with a purely graphic function, see §§5.50, 53 for exemplification. Thirdly, the test-case word *cȳse* ‘cheese’ can only be explained on general principles if it is assumed that the diphthongization was a genuine sound change; otherwise it must be explained away in an ad hoc fashion, see §5.72 for discussion. Fourthly, it is clearly possible to explain palatal diphthongization as a natural phonological process, which it makes it *prima facie* plausible. But this last point is vulnerable, for one common explanation is undoubtedly phonologically unsafe. That is, leaving aside the question of stress prominence, the view represented in Campbell (1959: §188) that the diphthongs due to palatal diphthongization were originally identical to the diphthongs produced by breaking. It is inconceivable that, for example, the influence of a following velar on /æ/, as in breaking, should produce a sound identical to that produced by the influence of a preceding palatal on /æ/. It is more likely that a preceding palatal would cause a partial raising of /æ/ together with diphthongization, the second element being dissimilated to low central, so giving a diphthong

of the order of [ea]. A parallel change can be supposed for original /æ:/, and for original /e(:)/ the same process would give [iə, iǝ].³ Through eventual reduction of the second element, where appropriate, the distinction between such diphthongs and the earlier diphthongs would become so minimal as to encourage orthographic identity, especially within a system where devices to represent diphthongs were limited, see Hogg (1979b: 97–8), Luick (1914–40: §171), Brunner (1965: §90A1). The only other important argument for denying the overall genuine nature of the sound change relies on the general arguments against short diphthongs discussed in §§2.19–29, which are ultimately unconvincing. The question of the relative prominence of the two elements of the diphthong seems undecidable. Luick's view of variable prominence, after Child (1903: 11–14), may have most to recommend it, although in the vast majority of cases the diphthongs quickly became falling. In the light of the above discussion we must conclude that palatal diphthongization of original front vowels was a genuine sound change, which may be approximately characterized as:^{4,5,6}

$$\left[\begin{array}{c} \text{V} \\ n \text{ high} \\ \text{-back} \end{array} \right] > [n+.5 \text{ high}] \left[\begin{array}{c} n-.5 \text{ high} \\ + \text{ back} \end{array} \right] / \left[\begin{array}{c} \text{C} \\ \text{-ant} \\ +\text{cor} \end{array} \right]$$

¹ These spellings, of course, represent only the usual development in EWS. For more detailed discussion of the various developments according to date and dialect, see below.

² For further and more detailed arguments see Bülbring (1900b: 97–104).

³ Evidence in favour of the assumption of partial raising can be found in the Nbr shift exemplified in **scēp* > *scīp*, see §5.54 for discussion. See also §5.212n2 for some relevant evidence from late texts.

⁴ It should be remembered, as stated above, that [ea, eǣ] soon merge with /æu, æu/, and then develop as they do, see §§5.41–6. The development of [iə, iǝ] involves merger with the other sounds represented by EWS (ie, ie), eventually to the monophthong /i/ if §5.164 is correct. Here we are concerned with the initial process only.

⁵ 'n+.5', 'n-.5' are ad hoc devices to show slight raising and lowering respectively.

⁶ With the exception of Girvan (1931: §64A) it seems not to have been suggested that older diphthongs, from whatever source, could have been subject to this change; yet this seems quite plausible. In such cases we may assume a slight raising of the first element of the diphthongs, but this raising would not have been sufficiently significant to be reflected in the orthography, nor would it have caused phonemic split. Against this view see Luick (1914–40: §174).

5.50 In WS /æ/ and /æ:/ when subject to the influence of a preceding palatal are diphthongized to [iǝ], [iə] respectively, with, see §5.49, later merger with the other sounds represented in WS by (ēǣ).¹ Examples of the change (in both EWS and LWS) are: *scēatt* 'treasure', *ċeaf* 'chaff', *ġeaf* 'gave'; *scēap* 'sheep', *ċēace* 'jaw', *ġēar* 'year', *ġēafon* 'they gave'.² For discussion of the interaction of this change and *i*-umlaut, see §5.72.

¹ Sometimes this leads to ambiguity, for in a number of words (ǣa) may represent either the diphthongization of /æ(:)/ or the influence of a palatal consonant on /a(:)/. Examples of this are *ġeatu* ‘gate’ nom.pl., *ġēarum* ‘years’ dat.pl. The resolution of the ambiguity is very difficult, since it depends upon whether or not /a(:)/ due to restoration of *ǣ* has been analogically levelled from the sing. or not, see §5.37 for discussion of the analogies involved. For the initial consonant of *ġeatu* see §7.41n1.

² There are few exceptions to this change, but note that *sceððan* ‘injure’, with *i*-umlaut, is the regular form in WS. It seems certain that the word is an Angl loan, see Wenisch (1979: 211–15). Other occasional exceptions, such as CP 73.10 *ġæġlbærnes* ‘wantonness’, CP(C) 350.22† *sceppend* ‘Creator’, Or *scæl* ‘shall’ (2×) may be due to Merc influence on the spelling. Ælfric regularly has *ġesthūs* ‘guest-house’, apparently with *i*-umlaut of undiphthongized /æ/. The form could be an Angl loan.

5.51 In Nbr there is a clear distinction between NNbr (including the eNbr texts) and SNbr in their treatment of /æ/¹ after a palatal. In NNbr there is a large number of spellings indicating diphthongization, such as LRid *scēal* ‘shall’, *ġeatum* ‘ornamentally’, LiGl *scēal*, *scēafte* ‘creature’ dat.sg., DurRitGl *sceall*, *ceaster* ‘castle’. Alongside these are many spellings which indicate /æ/, thus RuneAuzon *cæstri*, Li *scæl*, *scæftes*, DurRitGl *ġiscæft* ‘creation’. Doubtless this variation implies either that the sound change was only partly implemented, or that scribes were uncertain as to how to represent the diphthong, or both.² In SNbr there appears usually to have been no change of pronunciation, but note Ru2 *scēal* (2×). Otherwise /æ/ remains, for example, *ġiscæft*, *cæstre*, *ġæf* ‘gave’. Thus SNbr contrasts with NNbr but parallels Merc, see §5.52, in having no palatal diphthongization except in one idiosyncratic example.³

¹ There are, of course, no examples of /æ:/ in Nbr.

² Such uncertainty would seem to be the best explanation of several spellings with (æa) in both Li and DurRit Gl, such as *sceæftes*, *-ġeæf* ‘forgave’. This is simpler than the suggestion of a different phonological development, as in Campbell (1959: §186), and is probably supported by the very confused DurRitGl 1.121.3 *geæð* ‘they go’, where there can be no question of palatal influence.

³ That is, provided one accepts that Ru2 *sceattas* ‘treasures’, *sceacrum* ‘robbers’ dat. pl. show the influence of a palatal consonant on /a/, following Lindelöf (1901: §60a), see further §§5.44n2, 5.70.

5.52 Outside WS and Nbr the only signs of palatal diphthongization of /æ/ occur in Ru1, where a minority of forms show the change, for example, *ceastre*, *ġeatt*, *ceaf*, *sceal*, *-sceatta*, alongside *cæstre*, *scæl*, and other words with undiphthongized forms only. This may be a further product of WS influence on the scribe of this text.

5.53 In WS /e/ and /e:/ when subject to the influence of a preceding palatal are diphthongized to [iǝ], [iə] respectively, with, see §5.49, later merger with the other sounds represented in EWS by (ǣe).¹ For EWS examples of

the diphthongization of /e/ are: *ścieran* ‘cut’, *ġiefu* ‘gift’.² For the very frequent spellings with ⟨i⟩, such as *ścīran*, *ġifu*, see §§5.163–5. In LWS both ⟨i⟩ and ⟨y⟩ spellings are found, such as *ġifu*, *ġyfu*, see §5.167. Although instances of /e:/ are rare in WS, examples of diphthongization run parallel to those above; hence EWS examples include *ġīe* ‘ye’ (occasionally, alongside usual *ġē*, showing the regular development in unstressed syllables, and which is also the normal LWS form).³

¹ The change is carried out very regularly, exceptions being rare. Instances of exceptions in EWS, which may be due to Merc influence, appear to be confined to Oros: *śceld* ‘shield’, *ġelp* ‘boast’ (noun only), *deofolġeld* ‘idolatry’, all alongside diphthongized forms. Exceptionally EWS *ścēd*, past tense of *sceādan* ‘divide’, never shows the change, but the more usual WS form is *sceād*, with the vowel of the present tense. In LWS *ÆHom(U)* has 13.67 *ġeldum* ‘tax’ dat.pl., alongside *ÆHom(H)* 13.67† *ġildum*, and the former may be nWS.

² See too GD 44.14 *ċiellan* ‘fire-pans’.

³ Other examples are etymologically uncertain, but it is probable that EWS *ġīet*, *ġīt*, LWS *ġyit*, *ġīt* ‘yet’ should be included here. Occasional poet. *ġīen* ‘yet’ does not occur in WS prose and is a borrowing of Merc *ġēn*, see Wenisch (1979: 161–5).

5.54 It seems certain that there is no palatal diphthongization of /e/ in Nbr, hence *śceld* ‘shield’, etc.¹ The status of the development of /e:/ is, however, more problematic. After /ʃ/ the only relevant form is common Nbr *ścīp* < **ścēp* (with the Angl development of *æ₁*). The standard assumption, that this is probably due to diphthongization to **ścīep* with later monophthongization, relies on a presumed parallel with WS, and it is equally possible, and simpler, to assume that we have here a raising of /e:/ > /i:/. By contrast, after /j/ (from whatever source) there is normally no change of /e:/, hence *ġēr* ‘year’, *forġētun* ‘forgotten’. But two words, namely *ġē* ‘ye’ and *ġē* ‘yea’, show forms apparently indicating diphthongization. For *ġē* ‘ye’ the distribution of forms is as follows: Li usually has *ġīe* alongside less frequent *ġē(e)*, except in MtGl where both forms are equally frequent;² DurRitGl has *ġīe* only; Ru2 has mainly *ġē(e)* with *ġīe*, *ġī* 2× each. For *ġē* ‘yea’ the distribution parallels that for *ġē* ‘ye’ in DurRitGl, Ru2, but in Li *ġēe* is normal, with *ġīee*, *ġī* once each. Any determination of what sound(s) these spellings might represent is difficult, but the following seems relevant. Firstly, ⟨ie⟩ spellings are restricted to two words which are likely to have been used most often in weak stress positions (possibly this may have been truer of *ġē* ‘ye’ than *ġē* ‘yea’, see §5.53). Secondly, the use of ⟨ie⟩ to represent a diphthong would be highly unusual outside EWS, see §2.37. Both these considerations make it most likely that the spellings reflect some kind of raising rather than diphthongization, with ⟨ie⟩ used to represent a vowel of approximately the value [i:].³ A further argument in favour of the above is that it is highly improbable that in OE weakly stressed syllables could contain diphthongs. In summary, the evidence from Nbr suggests

that in that dialect there was never any palatal diphthongization of either /e/ or /e:/, but that /e:/ was raised after either /j/ or /j/ under conditions which are not yet clear.

¹ Various forms such as *gife* 'give', *forġif* 'forgive' in DurRitGl only, alongside more frequent (*for*)*ġefe*, etc., are not to be included here. Parallel forms are to be seen outside Nbr, thus EpGl 525 *ġibaen* and, possibly, frequent LWS *ġifan*, etc. No wholly satisfactory explanation of these forms, which appear to be analogical, has been given, see firstly Bülbring (1900b: 101–2), Luick (1914–40: §§172A2, 173A3), and, for the possibility of Scandinavian influence, which is probable for ME, Björkman (1900: 154–6).

² LkGl(Li) 11.42 † *ġiwe* and MkGl(Li) 14.42 *ġe* show a purely orthographic substitution of ⟨æ⟩ for ⟨e⟩.

³ Length would, of course, depend on stress, see §2.80. If the base form were the weak stress form, as is usual in OE, it would be preferable to see these examples as raisings of /e/ rather than /e:/.

5.55 In Kt and Merc there are no signs of palatal influence on /e(:)/ except Ru1 *scīpa* 'sheep' gen.pl. alongside frequent *scēp*, etc., cf. §5.54.¹

¹ PsCa(A) 7.82 *ġildu* 'I pay' is more probably an isolated example of the extension of an umlauted vowel into 1st sg.pr.ind. from 2nd, 3rd sg.

(b) Palatal diphthongization of umlauted front vowels

5.56 In WS and Nbr only, hence not Ru1, see §5.55, when *ē* and *æ*, but not *ȳ*, appear as the result of *i*-umlaut, then these vowels undergo a development parallel to that undergone by original *ē* and *æ* in WS. Phonetically this poses no new problems, and the change can be characterized in the same terms as those for palatal diphthongization, see §5.49, except that it should be noted that the change appears to take place only after /j/, not after /j/ < Gmc */j/, except in one dialect, see §5.58. Naturally the change could not take place after the Type 3 palatals of §5.48. The change is, however, restricted to a few lexical items, and even in those cases it is no more than sporadic. For this and the chronology of the change see §5.72.

5.57 In EWS the only examples of this diphthongization appear to be in CP(H), which has *sciendan* 'hurt' (12×), cf. CP(C) † *scendan*, and *tōscēat* 'cuts in two', cf. LWS *tōscēat*, showing, respectively, diphthongizations of the *i*-umlaut of **ā* and **ā*. Examples of the change from LWS are available for the umlauts of *a*, *ā*, *ā*, and *ō*, as follows: *sceaððig* 'harmful' alongside *scæððig*; *scēað* 'sheath' alongside *scæð*;¹ regular *scyndan* 'hurt, shame', *ġescyndnyss* 'shame', note however WHom *scendan* (3×); *ġescȳ* 'shoes', never ***ġescē*.² Other words in WS have undiphthongized forms throughout, such as *scencan* 'pour', *scēnan* 'break'. In Nbr the change appears to be confined to Li, where only two words show the change: (*ġe*)*scēoea* 'shoes' alongside

scōēas and MkGl(Li) 5.4 *tōscēænde* 3sg.pa.ind. against JnGl(Li) 19.36 *tōscēanas*.

¹ Note here the inverted spelling ÆLS 3.72, 11.210 *scēt* ‘he shoots’.

² As can be observed, the diphthong undergoes the normal LWS development to /y(:)/, see §5.167.

5.58 The only example of diphthongization, more properly raising, of an umlauted fronted vowel after /j/ is DurRitGl *gīmung* ‘marriage’ and derived forms (13×), which must have the development **yaumj-* > **yēamj-* > **gēamj-* > **gēm-* (*i*-umlaut) > *gīm-*, where the final change parallels Nbr **scēp* > *scīp*, see §5.54.

(c) *Palatal diphthongization of back vowels*

5.59 In all dialects after /j/ (< Gmc */j/ only, see §5.48) and in Nbr and most WS after /f/ (< Gmc */sk/), spellings such as ⟨eo⟩ often appear where etymologically the sequence palatal consonant + back vowel would be expected. Thus we find *gēoc* ‘yoke’, *scēort* ‘short’ rather than **goc*, *scort* (and similarly for long vowels). The question of whether such spellings represent genuine diphthongs or whether the ⟨e⟩ (sometimes ⟨i⟩) is merely a diacritic is one of the most difficult in OE phonology. Independently of the other arguments concerning short diphthongs, see §§2.19–37, 5.49, there are two points in favour of a diacritical interpretation. Firstly, the general later development of such forms is as if there never had been any diphthong present, thus ME *yok*, *scort*. Secondly, similar spellings arise in unstressed syllables, where there can be no question of a diphthong being present, such as EWS *herigeas* ‘armies’, CP(C) † *adwāscēaþ* ‘they quench’, and therefore it would seem plausible to assume the same usage in stressed syllables. Against this it may be argued that in LWS spellings such as *sēcean* ‘seek’ are rare, see §2.68, and therefore that it would be unwise to seek too close a parallel between the spellings in stressed and unstressed syllables. With regard to the first point, although the statement is true in general, there are particular cases in OE where a diphthongal development apparently has to be postulated. The most notable cases involve *i*-umlaut, but there may be others, see further the discussion in §5.60. Thus it should be clear that the general problem is not easily resolvable, and since it seems unlikely that we can obtain more than particular answers to particular cases, these will be discussed in more detail in the appropriate sections below. Where a diphthongal interpretation seems preferable a further question arises, namely whether the diphthongs were rising or falling. Luick (1914–40: §169) and Girvan (1931: §§127, 70) argue that although in most cases the diphthongs were rising, a substantial minority were falling. Campbell (1959:

§§171, 176) suggests that only a very small number were falling. On the other hand Brunner (1965: §§90, 92) appears to believe that all such diphthongs were rising.¹ It is argued below that Brunner is correct in denying the necessity to propose falling diphthongs. Rather, where diphthongs occur we may suppose that the change is due to the insertion of a nonsyllabic high front vowel [i̯] between a palatal consonant and a back vowel, since that interpretation is consistent with the phonetics, the orthography, and later developments. When diphthongization occurs, therefore, the change may be characterized approximately as follows:

$$\emptyset > \left[\begin{array}{c} \text{V} \\ +\text{high} \\ -\text{back} \\ -\text{syll} \end{array} \right] / \left[\begin{array}{c} \text{C} \\ -\text{ant} \\ +\text{cor} \end{array} \right] \text{ ————— } \left[\begin{array}{c} \text{V} \\ +\text{back} \end{array} \right]$$

¹ But Brunner believes that in many instances the spellings are purely diacritical, see §2.36n1.

5.60 In EWS when /j/ is followed by /u(:)/ the sequence ⟨geo-⟩ usually results. Instances of this change are *geoc* ‘yoke’, *geogub* ‘youth’, *geong* ‘young’, *geō* ‘formerly’.¹ In LWS, however, a slightly more frequent spelling is ⟨iu-⟩, hence *iuc*, *iugub*, *iung*, *iū* (alongside ÆCHom *giū* (6×)).² This spelling is rare in EWS, and other variant spellings are equally rare and largely restricted to EWS, thus CP 201.21, CP(C) 196.8 † *gioke*, *giogub*, *giong*, CP(C) 2.3 † *giō*; *iongum*, *iō* (also ÆGram 37.11); CP(C) 178.21 † *giungan*. Most of these spellings are no more than expected orthographic variations,³ and taken together they would seem to confirm that a sound change of the form [ju(:)] > [j̥ju(:)] has taken place.⁴ The only examples with /o(:)/ are of *geōmor* ‘sad’ and its derivatives, which are regularly so spelled, showing an important contrast with the *geong/iung* type above.⁵ An example with /a:/ due to restoration of *a* is *geāra* ‘formerly’, but see §5.50n1. With [ā] the most common spelling is *geo-*, thus *geond* ‘through’, *begeondan* ‘beyond’, also CP 443.24 *geonre* ‘yon’ dat.sg.fem. In EWS there are also occasional ⟨gio⟩ spellings, such as *giond*, *begiondan*, which do not persist. There is no reason to suppose that any of these spellings reflect anything other than an insertion of [i̯] parallel to that above, but the virtually complete absence of ⟨gea⟩ spellings⁶ is noteworthy given the distribution of the *man/mon* type, see §5.5. It may be that Brunner (1965: §92A5) is correct in assuming this to be the result of the stereotyping of an unstressed form, but it is probably also an indication that a genuine sound change has taken place rather than the simple insertion of a diacritic.⁷

¹ The length mark is placed over the second element primarily in order to distinguish such spellings from the spellings for long diphthongs from other sources. Such placement

would also imply a rising rather than a falling diphthong wherever a diphthongal interpretation is appropriate.

² Luick (1914–40: §169.1), Campbell (1959: §172), and Brunner (1965: §92.1A) state the contrary, that is, that in LWS the usual spelling is ⟨geo⟩, but this seems to be based on a misreading of Bülbring (1902: §298). The ratios of ⟨iu⟩ to ⟨geo⟩ spellings in Ælfric for *iuc*, *iugub*, *iung* are, respectively, 2:5, 2:3, 2:1, whilst *geō* occurs only at ÆLet 3.120 alongside very frequent *iū*.

³ As is shown by Oros *Geoweorþa* representing Lat *Iugurtha*.

⁴ It could be argued that the ⟨iu⟩ spellings are more likely to represent /ju(:)/, but these spellings must be placed in context. Firstly, they occur alongside ⟨geo⟩ spellings, which probably show a diphthong. Secondly, it is difficult to see what other spellings scribes could have used, for ⟨gio⟩ and ⟨geo⟩ would be equivalent, and ⟨giu⟩ would be equivalent to the former, because of the merger of /io/ and /eo/ in WS, see §5.155. Note that in both Nbr and Kt, where the development of diphthongs is different, the orthography allows a more exact representation, see §§5.61, 63.

⁵ PsGl(G) 6.7 *iūmerunge* ‘sadness’ is the only example with ⟨iu⟩, and is probably an inverted spelling due to the false equation of ⟨geo⟩ and ⟨iu⟩.

⁶ SedGl 2.1, 2.3 has *geand* glossing *per*.

⁷ For forms with /i/ in the following syllable which are subject to *i*-umlaut, see §5.64.

5.61 The Nbr forms which correspond to those in WS are: *giung* ‘young’, *begeonda* ‘beyond’ 3× alongside *begeande* 1×, whilst Li *geocc*, DurRitGl, Ru1 *ioc* may show a development from */jok/ rather than */juk/. Additionally there is the form *geōna* ‘yet’ and, with /j/ transferred from the past, *geonga* ‘go’, *geong* ‘way’ alongside BDS 3 *hiniongae* ‘departure’. Li, DurRitGl *giungo* ‘I go’, Li *giunga* ‘I may go’ presumably show the same development, but with an alternative present from **gungan*. More frequent than *giung* is *ging*, for which see §5.64, and the Nbr equivalent of *geoguð* is always *giguð*, for which see §5.68n4.

5.62 The relevant forms in Merc are as follows: Ps(A): *gung* beside PsGl(A) 118.9 *ging* glossing *juvenior*, *guguð* beside *iuguð*, *geond-*, *geāmrung*; Ru1: *iuguð*, *iung*, *geond*, *begeonda*, *iāra*; CorpGl *geoc*, *geond*, *biġeonan* ‘beyond’. It is most probable that the ⟨iu⟩ spellings indicate the same development as in LWS, see §5.60, and the ⟨gu⟩ spellings in Ps(A) are more likely to show orthographic uncertainty over the correct representation of [jiu] than a failure of diphthongization, that is to say, ⟨gu⟩ and ⟨iu⟩ are here equivalent spellings.¹ In *geāmrung* we may have either confusion of ⟨ea⟩ and ⟨eo⟩, see §5.45, or, less probably, a development where Gmc **ā* + nasal remains unrounded, see Brunner (1965: §80A3). For *ging* see §5.64.

¹ This is made more probable by PsGl(A) 24.7 *guiuðu*, where ⟨i⟩ and ⟨g⟩ have been transposed. Other spellings include 87.16 *gude*, 102.5 *guðuð*.

5.63 In Kt the regular spelling of relevant forms is ⟨gio⟩, for example, Ch 1510 *gioc*, CollGl 49.201 *giond*, 49.94 *giomras*, but note Ch 1264

iocled and Ch 161 ('Merc-Kt', Sweet 1885: 455) *geocled*, also CollGl 49.815 *iunges*.

5.64 Only a few forms show this change with /i/ in the following syllable, examples in WS from original */ju(:)/ being *gingra* 'younger', *gingest* 'youngest' and CP(C) 70.19 † *gicða*, CP(H) 71.18 *giecða* 'itch'.¹ Exceptions are rare: CP(H) 387.33 *giongra*, 451.28 *giongrum*. For Nbr Li has *gingesta* (2×) alongside *giungra* (3×), Ru2 has *gingra* (3×). For Merc Ps(A) has *gingrum* (1×) alongside *iungra*, *gungra* (3×), see §5.62, *gungesta* (1×). It would appear from this that the normal development is to *gi-*. Most probably the original change is from */ju/ > [jju], see §5.59, which is then subject to *i*-umlaut giving */jji/, which is then monophthongized to /ji/.² Unumlauted forms, such as *giungra*, *giungesta*, have been levelled in favour of pos. *giung*, etc.; conversely pos. *ging*, see examples in §§5.61–2, shows extension of umlaut from the compared forms.³ Alongside *geond* EWS has fairly frequent *gind*, and in LWS WHom has *gynd*, which may derive from */jandi/ with *i*-umlaut to */jiynd/ and subsequent monophthongization to EWS [jind], LWS [jynd], see §§2.37, 5.155ff. Similar forms appear in EpGl *beginan* 'beyond', Li *begienda*, and AldV1 *gend* probably shows a parallel form in Kt.⁴

¹ With (ie) as an inverted spelling for /i/, cf. LchI&II *gicpa* (frequent). Note also CP(H) 71.11 *giocða*, derived, apparently, from a form without following /i/.

² Thus Child (1903: 50). Alternative proposals, such as Luick (1914–40: §195), Campbell (1959: §178), Brunner (1965: §§92A1, 31A2) and references therein, assume a falling diphthong of the type /io/, with umlaut in WS to *ie* and monophthongization after a palatal to /i/. But for WS this fails to explain the total absence of (y) spellings, and a similar objection holds for Angl where the alleged development is: *iu > *yu > *y > i (Brunner, 1965: §92A1) or *ju > *iu > *y > i (Campbell, 1959: §176). Luick (1914–40: §169A4) suggests for Angl that unumlauted /io/ is monophthongized by Angl smoothing, but this not only necessitates a shift of prominence but also implies that such smoothing takes place before [ŋ], which seems implausible. Note further that if it is assumed that there was no diphthongization after /j/, then the development of */jungira/ would be to */jyngra/, in which case the actual range of spellings would be inexplicable. Thus these shifts provide extremely strong evidence for the development of rising diphthongs after /j/. Note finally that in the above discussion no account has been taken of length, purely for the sake of simplicity.

³ So Paul (1880: 42) and others. Campbell (1959: §176n2) denies the analogy, at least for Ps(A), but the denial contradicts what is said in the body of the text. See also n2 above.

⁴ For an alternative explanation of EWS *gind* and Kt CollGl 49.111 *gindrencað*, see Brunner (1965: §92A5).

5.65 Evidence which would suggest a similar process after /f/ is lacking in Merc and Kt, but there are varying degrees of such evidence in EWS, LWS, and Nbr. Since the treatment of */ju(:)/ and of */fo(:)/, */fa(:)/ is different in each of these dialects, they are discussed separately below.

5.66 In EWS the only form suggesting diphthongization of */ʃu/ > /ʃju/ is *sceolon* ‘they shall’, occurring (CP 4×, Oros 1×) alongside usual *sculon*, see §5.68n5 for further discussion. Otherwise ⟨scu-⟩ remains, for example, *scūfan* ‘shove’, *sculdor* ‘shoulder’, *onscūnian* ‘shun’, *scūr* ‘shower’. Thus it would appear that there was normally no change in EWS.

5.67 In LWS the position is not radically different, although the evidence is more variable and difficult. *Sculon* remains as the normal form in WHom alongside *sceolon* (2×) and in WPol alongside *scylon* (6×), whereas in Ælfric the normal form is *sceolon* alongside a minority of *sculon* forms. For the development to *scylon*, also occurring at ÆHom 31.12, ÆLet 3.7, WHom 17.33, see §5.68. The only other forms regularly to show ⟨sceo-⟩ are *sceōfan* ‘shove’ beside rare *scūfan* and *sceocca* ‘devil’ beside less frequent *scucca*.¹ In the verb form the spelling probably represents the normal strong class II form, that is, *scēofan* not ***sceōfan*, rather than the analogical *scūfan*, see OED *shove v*. In the latter case Gmc **skukkon* could develop to either *scucca* or *scocca*, cf. EpGl, ErfGl *scōcha*, LS 29.250 *scocca* and §3.10, and hence *sceocca* may show the normal development of */ʃol/, see §5.69. Otherwise normal WS forms are, for example, *sculdor*, *onscūnian*, *scūr*.² The balance of probability, therefore, must be that the limits of the change in LWS were very similar to those in EWS.

¹ There are a few ⟨sceu⟩ spellings: ÆGram 137.1 *sceufe*, PPs 105.27 *sceuccum*, ÆCHom I 18.250.1 *sceule*, which appear to argue against the position immediately below. But their status must be uncertain, and against these forms note invariable *scuton* ‘they shot’, *scufon* ‘they shoved’.

² WHom 8b.30 has *sceoldru* ‘shoulders’ and outside Wulfstan and Ælfric there are a few ⟨sceo⟩ spellings, such as, And 510 *sceōr* ‘shower’, Lch II 1.1.17 *sceorfe* ‘scurf’ dat.sg., PPs 52.1 *onsceondlice* ‘abominable’. These might well suggest a sub-dialect where some change took place, but they hardly constitute sufficient evidence to suggest that the change was general in LWS (*pace* Campbell, 1959: §180).

5.68 In NNbr the regular development of *sculon* is to *scilon*, thus Li, alongside equally frequent *sciolun*, *sciolon* due to back umlaut of /i/, see §5.104(3). CædH(L) also has *scilun* beside CædH(M) *scylun*, CædH(D,P) *sciulun*. In other forms the normal development is to *scý-*, thus Li, DurRitGl *scýa* ‘shadow’ (alongside more frequent *scūa*),¹ *gescýfen* ‘shoved’, *scýldrum* ‘shoulders’ dat.pl., *scýniga* ‘shun’, *ofscýfende* ‘shoving’. There are two forms with *scýū-*: LkGl(Li) 12.54 *scýūr* ‘shower’, DurRitGl 127.1 *ofscýufon* ‘they shoved’.^{2,3} The most probable explanation of these forms, to parallel the change after initial /ʃ/, see §5.61, is that */ʃu(:)/ developed an epenthetic glide to give /ʃju(:)/ and that this rising diphthong usually monophthongized to give /ʃy(:)/.⁴ This would also explain LWS *scylon*, §5.67, with EWS, LWS *sceolon* showing unmonophthongized forms, see §5.66–7, parallel to NNbr

sciulun scýūr, etc.⁵ The extent of the same change in SNbr is uncertain, for Ru2 has only *scíolun* (2×), *scýldrum* (1×) against *scūa* (2×), *scūr* (1×), see Lindelöf (1901: 37).

¹ Since the initial syllable of *scūa* is both stressed and open, the vowel of that syllable must be long, regardless of origin.

² LiMtProl 8 *shya*, MtGl(Li) 4.16 *scūia* show only orthographic variation within normal limits for the text.

³ Li also has MtGl 12.10 *scriuncen*, LkGl 18.4 *gescrynca*, MtGl 13.6 *gescruingon*, forms of *scrincan* ‘shrink’, which apparently suggest a parallel shift after /ʃr/.

⁴ Campbell (1959: §176) explains these forms as due to an original rising diphthong becoming falling, then monophthongising to /y/ with later unrounding. For details of and objections to this proposal see §5.64n2. It is far more probable that the normal result of monophthongization of /ju(:)/ is /y(:)/ but that in the case of *scílon* there is an unusual monophthongization to /i/. Presumably the same process gives Nbr *giguð*, rather than *geoguð*, see §5.61.

⁵ It must be emphasized that in the dialects discussed in §§5.66–8, *sculon* undergoes developments peculiar to itself. Hence arguments such as that referred to in n4 above, in so far as they rely upon the development of *sculon*, have no particular relevance outside that word. Furthermore, the existence of apparently diphthongal forms of that word in WS do not prove that the change represented by those forms was general to that dialect.

5.69 The sequences /ʃo(:)/, /ʃa(:)/ sometimes remain spelled ⟨sco-, sca-⟩ in WS, sometimes are spelled ⟨sceo-, scea-⟩.¹ As a general guideline it can be stated that ⟨e⟩ is less likely to be inserted before *ō* than before *ā*, and that such insertion is more likely in LWS than EWS. Thus, for example, EWS has only *scort* ‘short’, whereas LWS usually has *sceort* beside less frequent *scort*.² Examples of the variation include: *sc(e)op* ‘poet’, *sc(e)ond* ‘disgrace’, *gesc(e)ōp* ‘created’, *sc(e)ōgian* ‘shoe’, *sc(e)acan* ‘shake’, *sc(e)adu* ‘shadow’, *sc(e)ādan* ‘divide’.³ Note especially that for Gmc */a/ + nasal ⟨ea⟩ and ⟨eo⟩ spellings occur in the expected dialectal distribution for the monophthong, see §5.5. Thus for WS the usual spelling is ⟨ea⟩, for example, *sc(e)amian* ‘be ashamed’, *sc(e)anc* ‘shank’, and infrequent ⟨eo⟩ is found only in EWS. This contrasts with the position after /j/, see §5.60. Given the variety of spellings, the development of Gmc */a/ + nasal, and the fact that in EWS similar spellings are to be found in unstressed syllables, see §2.68, all together with the failure of ME evidence to suggest that a diphthong was ever present in these words, it seems most probable that ⟨e⟩ is here purely diacritic, indicating the palatal nature of preceding *sc-*.⁴

¹ The spelling ⟨io⟩ occurs at CP 77.7 *sciolde*.

² But as an indication of the wide variations which this guideline glosses over, consider the ratio of *sceolde*:*scolde* spellings in two EWS and two LWS texts: CP(H) – 44:40; Or – 46:0; ÆCHom 115:3; WHom 13:26. Whilst this may not be indicative of general ⟨eo⟩/⟨o⟩ usage in these texts, it probably correctly suggests that such usage is as often a matter of individual scribal preference as of dialect variation.

³ Ru1 has various forms of *sceādan* (4×) alongside *scādan* (1×), which are best explained as due to WS scribal influence. On the other hand, a few examples in the early Merc glossaries such as *sceadu* seem to be best interpreted as examples of the present orthographic phenomenon, see further §5.106n2 and references.

⁴ Probably the strongest argument in favour of a diphthongal interpretation is an apparent parallelism with the behaviour of *scū-*, but such a purely theoretical argument is not compelling, especially in the light of §5.67.

5.70 In NNbr the regular spellings of original /ʃo(ɪ)/, /ʃa(ɪ)/ are ⟨sċeō-, sċeā-⟩, hence *sċeort* ‘short’ and many other forms parallel to those cited in §5.69.¹ Given the greater degree of diphthongization of */ʃu(ɪ)/ in Nbr compared with WS and the regularity of the spellings, it is probably not possible to decide whether the shift is purely orthographic or represents an actual change in pronunciation. In SNbr the shift is seen only after /ʃa(ɪ)/, hence Ru2 shows a contrast between *sċeacca* ‘shake’, *-sċeaðo* ‘devil’,² and *scortige* ‘shorten’, *ġiscōp* ‘created’. Again it is virtually impossible to evaluate the orthographic evidence.

¹ But DurRitGlAbbrev has: *scort* (2×), *scoma*; JnGl(Li) has *scōēs* ‘shoe’ gen.sg.; CædH(M,L) has *scōp*.

² Alongside *-sċeoðo*, see §5.44(1), and *morsċeðo*, where ⟨æ⟩ is probably insignificant (Lindelöf, 1901: 37).

(d) *Summary*

5.71 The set of changes described above has very few morphological consequences, since any change is usually seen throughout the paradigm. It should be noted, however, that the various ablaut series may be obscured, as in *ġildan*, *ġeald*, *ġuldon*, *ġolden* ‘yield’ III; *scīran*, *sċear*, *sċēaron*, *scoren* ‘cut’ IV; *ġifan*, *ġeaf*, *ġēafon*, *ġifon* ‘give’ V. Orthographic change is seen in other verbs, such as *sċeacan* ‘shake’ VI.

5.72 With regard to the relative chronology of the changes, it is clear that they cannot be earlier than palatalization of Gmc velars, since, wherever appropriate, the palatals arising from that change have the same effect as original palatals. Hence the change cannot be earlier than restoration of *ǣ*, see §7.25 and Hogg (1979b: §2). We may also, therefore, reasonably assume that the present changes were later than breaking, see §5.38.¹ The major question, therefore, must be whether these precede or follow *i*-umlaut.² Since the relative chronology of palatalization of Gmc velars and *i*-umlaut cannot be determined with absolute certainty, although it is probable that the former was well under way and perhaps even complete by the time of the latter, see §§7.25–6, 30, Hogg (1979b: §5), Colman (1986), it is essential to rely primarily on the evidence afforded by the interaction of palatal

diphthongization and *i*-umlaut. It has long been established that the key form here is WS *ċyse* ‘cheese’ < Lat *cāseus*. As argued by Kuhn and Quirk (1953: 146–7),³ if *i*-umlaut preceded diphthongization, then the following development would have occurred: */kɑ:si/ > */kæ:si/ (first fronting) > */ʃæ:si/ (failure of *i*-umlaut, see §§5.74, 80) > */ʃæɑsi/ (palatal diphthongization), giving ***ċēase*. The reverse order, however, gives: */kɑ:si/ > */kæ:si/ > */ʃæ:si/ > */ʃæɑsi/ (palatal diphthongization) > */ʃi:si/ (*i*-umlaut, see §§5.74, 164), giving EWS **ċīese*, LWS *ċyse*.⁴ Those who argue against this suggest one of three possibilities. Firstly, that so-called palatal diphthongization is purely an orthographic feature (Daunt, 1939; Stockwell and Barritt, 1951: 26). Secondly, that *ċyse* is the result of an idiosyncratic combination of *i*-umlaut and the influence of an initial palatal (Samuels, 1952: 36). Thirdly, that *ċyse* is an exceptional form (Lass and Anderson, 1975: 281–2).⁵ The first of these arguments is refuted by the evidence above clearly indicating diphthongal pronunciation, and the last two arguments, since they are ad hoc, cannot be strong enough to refute the evidence of *ċyse*. At first sight it would appear that the existence of forms due to palatal diphthongization of umlauted front vowels would suggest that in general the diphthongization was the later change, but this is not so. Such diphthongization is only sporadic, see §§5.66–8, and this strongly indicates that the change was already in full operation before the time of *i*-umlaut, but that it continued to operate in a much weakened form for some time after that.

¹ Hence the argument of Girvan (1931: §64a), which in any case smacks of special pleading, that breaking and palatal diphthongization were roughly contemporaneous, falls because of the undoubted chronological relation between restoration of *a* and the palatalization of velars.

² Note that second fronting and palatal diphthongization are mutually exclusive. Nbr forms such as *sciolum* presumably show that palatal diphthongization precedes back umlaut.

³ The argument is originally due to Sievers (1883: 206), supported by Bülbring (1900b: 88).

⁴ The absence of **ċēese* from our texts is accidental and unimportant.

⁵ Colman (1985: 16–17) also denies the reality of palatal diphthongization in *ċyse*, but her position seems eventually compatible with the approach taken here.

5.73 It is perhaps worth recalling that in those cases where palatal diphthongization is merely the reflection of an orthographic change, most obviously in unstressed syllables, see §5.59, and in those cases where /f/ is followed by a nonhigh back vowel, see §§5.69–70, then there can be no question of establishing any kind of relative chronology. On the other hand the introduction of diacritic spellings in such instances is not inconsistent with the relative chronology of the related phonological changes which permit the creation of such spellings.

VI *I-umlaut*

5.74 During the prehistoric OE period stressed vowels became sensitive to a high front vowel or approximant in the following syllable, and there thus appears a set of changes which is amongst the most thoroughgoing and important in OE. This set of changes is known under the collective title of *i-umlaut*. The sounds which cause *i-umlaut* are: /i/, as in */do:iθ/ > /de:iθ/ = *dēþ* ‘he does’, see below; /j/, as in */trummjan/ > /trymman/ = *trymman* ‘strengthen’; /y/, as in */gāduling/ > */gādyling/ > */gædyling/ > /gædæling/ = *gædeling* ‘companion’.^{1,2} As will be observed from these examples, the number of intervening consonants is generally irrelevant, for possible exceptions see especially §5.80. There is, therefore, no reason to suppose that we are dealing here with anything other than a type of vowel harmony, a process already well known in WGmc, see §3.6.³ Vowels which are potentially subject to *i-umlaut* may be classified into three types: (1) back vowels; (2) front vowels; (3) diphthongs.⁴ All back vowels are subject to *i-umlaut*, when they change to the corresponding front vowel, thus */u(:)/ > /y(:)/, */o(:)/ > /ø(:)/,⁵ */ɑ(:)/ > /æ(:)/. In S. dialects especially, /ø(:)/ unrounds to /e(:)/, hence *dēþ* above, see further §5.77. The *i-umlaut* of front vowels is much more restricted, for long vowels are never affected, the umlaut of */e/ is uncertain, and the umlaut of */æ/ is not fully carried out. With these reservations, however, we may posit changes of the form */æ/ > /e/ and (?) */e/ > /i/, see §§5.80–1 for full details. For the *i-umlaut* of diphthongs there is a clear difference between WS and nWS. In WS */io, iō/ is umlauted to the sound represented by EWS ⟨ie⟩, whose precise quality is uncertain, but which may represent at first a diphthong of the order of /iy, iÿ/, see Colman (1985), which perhaps then falls together with the diphthong produced by palatal diphthongization of /e/ as the monophthong /i(:)/, see §5.164. For the possible umlaut of */eo, eō/ see §5.84 below. The umlaut of */æɑ, æǣ/ is the same as the umlaut of */io, iō/. The changes occurring here are obscure, partly because of the methods used to represent diphthongs in WS, but it seems likely that in *i-umlaut* the first element of the diphthong was raised where possible, and that this raising was accompanied by raising and fronting of the second element. If this is so, it implies that */io, iō/ was already on its way to /eō/, since otherwise the first element of the diphthong could hardly have been raised.⁶ In nWS the only diphthong to be affected by *i-umlaut* is */æɑ, æǣ/, which changes to /e(:)/. Presumably */io, iō/ is unaffected because its first element has not started to lower, unlike the position in WS, see above and n6. Given the above we may characterize the *i-umlaut* of back vowels, front vowels, and diphthongs approximately as follows:

Back vowels:

$$V > [-\text{back}] / \text{_____ } C_0 \begin{bmatrix} +\text{son} \\ +\text{high} \\ -\text{back} \end{bmatrix}$$

Front vowels:

$$V > [n + 1 \text{ high}] / \begin{bmatrix} \text{_____} \\ n \text{ high} \end{bmatrix} C_0 \begin{bmatrix} +\text{son} \\ +\text{high} \\ -\text{back} \end{bmatrix}$$

For diphthongs:

$$VV > \langle [\text{max high}] [\text{max high}] \rangle_{\text{WS}} \begin{bmatrix} n + 1 \text{ high} \\ -\text{back} \end{bmatrix}_{\text{nWS}} / \text{_____ } C_0 \begin{bmatrix} +\text{son} \\ +\text{high} \\ -\text{back} \end{bmatrix}$$

In principle, at least, the three rules for each dialect can be collapsed together, but the result is rather complex, cf. Lass and Anderson (1975: 128).

¹ /y/, of course, can only arise due to the operation of *i*-umlaut, and the phenomenon by which an umlauted vowel can itself cause umlaut is often known as double umlaut (Luick, 1914–40: §198 and A2). It is clear that /y/ has the same relevant phonetic characteristics as /i,j/, and therefore it is proof that *i*-umlaut is an iterative rule, see S. R. Anderson (1974: 124–33). This, of course, contradicts the claims concerning the properties of iterative rules made in Halle and Vergnaud (1988: 34–5). For details of iterative umlaut, and the possibility that in WS the umlaut of */æ:a/ could also cause umlaut, see §5.76.

² There are three major types of exception to *i*-umlaut. Firstly, if /j/ is the result of the palatalization of earlier */y/, as in **dæg* ‘day’, see §§7.16, 29, then that /j/ does not cause umlaut, see for further discussion §5.86. Note here that Ps(A) *deg*, etc. is due to second fronting, not *i*-umlaut, see §§5.87ff. Secondly, if /i/ is due to the raising of /e/ before /j/ in unstressed syllables, as in *hālig* ‘holy’, *humig* ‘honey’, *mōdig* ‘brave’, see §7.70n1, then there is no umlaut. The same applies to the medial /i/ of weak class 2 verbs, such as *lufian* ‘love’, where earlier */e/ is the *i*-umlaut of */o/, see further §5.85(8). Thirdly, an /i/ in the second element of a compound does not cause umlaut provided that the word is still treated as a transparent compound. This is most frequently seen in personal names, such as *Ōsric*, never **Ēsric*, but may also be the cause of alternations such as *ānlic*, *ānlic* ‘only’, *ārlic*, Ps(J) 30.25 *āerlice* ‘early’, JnGl *ārmorgen*, *āermorgen* ‘in the early morning’, *þuslic*, *þuslic* ‘such’, *sāmtinges* (rare, cf. Campbell, 1959: §204.2), *sāmtinges* ‘in close connexion’. But for alternative explanations see §5.85(10a). Note, however, that the presence or absence of *i*-umlaut is not caused by stress, which is merely a reflex of the morphological status of the element containing /i/, cf. Sievers (1902) and most authorities.

³ Two other explanations of *i*-umlaut have been common in the past, although both are now discredited. The first of these is the *Mouillierungstheorie* of Sievers (1901:

§765), see too Luick (1914–40: §200), which claims that the process is one by which a consonant or consonants immediately preceding /i/ are palatalized and these palatalized consonants in turn front or raise the stressed vowel. For the arguments against this theory see Samuels (1952: 38–40), Campbell (1959: §192). The second explanation, again associated with Sievers, see Brunner (1965: §94A), suggests a process of *i*-epenthesis before a palatalized consonant (via the *Mouillierungstheorie*). For arguments against this suggestion see Samuels (1952: 40n3) and §2.18.

⁴ For the *i*-umlaut of diphthongs created by the palatal diphthongization of back vowels see §5.64.

⁵ For the arguments in favour of the transcription /ø(:)/ rather than /œ(:)/ see §2.17.

⁶ The umlaut of the WS diphthongs is obscured not merely by the orthography, but by other factors too. That the first element was raised, even for */io, iō/, is probably confirmed by the failure of that diphthong to umlaut in nWS, for if the first element was already maximally high it could not raise further, and it is probable that the diphthong lowers first in WS, see §5.155. Although the phonemic merger of /io/ and /eo/ was clearly later than *i*-umlaut, it is possible that some lowering had already taken place in WS only.

(a) *i*-umlaut of back vowels

5.75 In all dialects of OE earlier */u(:)/ is umlauted to /y(:)/, regularly spelled ⟨y⟩.^{1,2} Examples are very numerous and are typically of the types *trymman* ‘strengthen’ < **trumman*, *brȳd* ‘bride’ < **brūdi*-. The change is found not only with all cases of */u(:)/ developed from WGmc, but also with */u/ by nWS combinative breaking of */i/, as in *wyrþ* ‘honour’, see §5.29 for details and examples.

¹ For examples of the archaic spelling ⟨ui⟩ for ⟨y⟩ see §2.18. In the earliest texts there are also a number of spellings with ⟨u⟩, such as EpGl *uppae* ‘upper chamber’, ErfGl 81 *gedurstip* [sic, for *gedyrstig*] ‘bold’, CorpGl 723 *ontūdri* ‘barren’. These are scarcely of any significance, nor are other variants such as ⟨wy-, wi-⟩, for which see Stolz (1908: 55), Ångström (1937: 20).

² For the LWS treatment of this *ÿ* see §§5.170–3, and for the shift to *ē* in Kt see §§5.194–5.

5.76 As noted in §5.74, when */u/ is umlauted to /y/ and stands in a medial syllable, then that /y/ can itself cause *i*-umlaut.¹ Examples are available for the subsequent umlaut of all monophthongs except /æ/, since that had become /a/ by restoration of *a*, and, accidentally, /o:/.² Examples for each vowel are: **ufumist* > *yfemest* ‘upmost’, **ātumist* > *ÿtemest* ‘outmost’, **ovusti* > *æfest* ‘haste’,³ **gaduling* > *gædeling* ‘companion’, **apuling* > *æpeling* ‘prince’, **ætgaduri* > *ætgedere* ‘together’, **fastunnja* > *fæsten* ‘fasting’, **haluftri* > *hælfter* ‘halter’,⁴ **haruwist* > *hærfest* ‘harvest’, **latumist* > *lættemest* ‘last’, **saturni-dæg* (< Lat **satūrni*) > *sæterndæg* ‘Saturday’, **avunsti* > *æfest* ‘envy’,⁵ **āmurja* > *æmyrge*, *æmerge* ‘embers’ (< Gmc **ai*), **ārundi* > *ærende* ‘errand’ (with **ā* due to restoration of *a*). The forms *æniġe* ‘one-eyed’, beside *āniġe*, and *ænlīpe* ‘single’, beside *ānlīpe*, suggest that the

umlaut of $\bar{e}a$ could also itself cause umlaut,⁶ which may be a helpful indication of the phonological status of the sounds represented by ⟨ie⟩. But against this is the regular form *endemes* ‘similarly’ < **andōmis*, see §5.79(1), which has unexpected umlaut in an analogous form.⁷

¹ This /y/ is soon afterwards reduced to /e/ since it is unstressed, see §6.64.

² Included here is the *i*-umlaut of */a/ in those Merc dialects which show second fronting, since that change is probably later than *i*-umlaut, see §5.92. Hence Ps(A) *festen* ‘fasting’, etc. show second fronting of /æ/ due to iterative umlaut, not umlaut of /æ/ due to second fronting. Included here all the alleged examples of iterative umlaut of */æ/ in Luick (1914–40: §198b), Campbell (1959: §203n1).

³ Alongside *of(o)st* < **ovosti* without iterative umlaut, see Brunner (1965: §44A4 and references).

⁴ It is not necessary to suppose that *hælfter* shows umlaut of */a/ due to failure of first fronting in an *a*-dialect area (§5.15), that is, **halftri* > *hælfter*. But this is probably the explanation of *ælf* ‘elf’ alongside *ylf*, where the latter shows umlaut of **ea* due to breaking, see further §5.82n4.

⁵ It is usual to include here *æće* ‘eternal’, derived as **ajuki* > **ajyci* > **æyci* (loss of /j/ intervocalically) > **ēci* (hiatus resolution) > **æće*. But it is quite plausible to assume that /j/ umlauts the preceding vowel without iterative umlaut. More common than *æće* is *ēće*, cf. CædH *ēci*, where it is probable that intervening /j/ prevented restoration of *a*, giving **æjući* > **ejyci* by umlaut. For a different view see Luick (1914–40: §243A2).

⁶ The alternation of umlauted and unumlauted forms here is due to their fluctuating status as compounds, see §§5.74n2, 85(10e).

⁷ But Met 9.1 *ærlēst* ‘cruelty’ is of no significance here, even if the nature of the error is uncertain, see Campbell (1959: §204.2n3).

5.77 In all dialects of OE earlier */o(:)/ is umlauted to /ø(:)/, usually spelled ⟨oe⟩.¹ Theoretically only */o:/ should be subject to *i*-umlaut, since in WGmc */u/ was retained before a high vowel, see §3.5. Forms with the *i*-umlaut of */o/, therefore, are either loan-words or native words where */o/ was analogically introduced.² Typical examples of the umlaut of */o/ and */o:/ are: *doehter* ‘daughter’ dat.sg., *oele* ‘oil’ (< Lat *oleum*); *ōēpel* ‘home’, *fōēt* ‘feet’. In WS and Kt especially /ø/ and /ø:/ are unrounded to /e/ and /e:/, and unrounding can be seen to a limited extent in Angl also.³ Unrounding of /ø/ is more frequent than unrounding of /ø:/. In EWS /ø/ remains only in *oele* alongside more frequent *ele*, and /ø:/ remains only in *ōēpel* alongside more frequent *ēpel*.⁴ In LWS only unrounded forms are to be found. Thus in these dialects we may assume that the unrounding was virtually complete by the time of the earliest texts. In Kt there are a number of examples showing unrounding of /ø(:)/ in the ninth-century charters, and in the tenth-century OccGl 49 the spelling is always ⟨e⟩, see §5.194–5 for full details and discussion. In NNbr the usual spelling of /ø/ is ⟨oe⟩, but both *exen*, *exin* ‘oxen’ and *merne* ‘morning’ dat.sg. always have ⟨e⟩, and it is sometimes alleged that this is due to a following palatal consonant or consonant group. With /ø/ due to early shortening of /ø:/, see §5.200,

Li has *gēbledsād(e)* ‘blessed’ occasionally alongside much more frequent *gēbloedsade*, etc., but DurRitGl always has the rounded forms; note also MtGl(Li) 10.31 *sellra* ‘better’. For /ø:/ NNbr usually has ⟨oe⟩, but after *w* ⟨e⟩ is quite common, for example, Li *wēstīg-*, *cuēn* beside *wōēstīg* ‘desert’, *cwōēn* ‘queen’,⁵ DurRitGl *gīcwēme* (1×) alongside frequent *gīcvōēme*, etc. ‘pleasing’. But it is likely that ⟨we-⟩ and ⟨woe-⟩ spellings are equivalent, for it is highly improbable that unrounding would take place most frequently after /w/, see the further examples and discussion in §§5.177–8. Other examples of ⟨ē⟩ are confined to Li and are rare, such as MtGl(Li) 8.12 † *tēða*, JnGl(Li) 19.22 *gērēfa* ‘Pilatus’. In SNbr the facts are quite parallel to NNbr, note especially Ru2 *exen* ‘oxen’, and the only significant divergence is that *bletsīga* ‘bless’ and forms always appear to be unrounded, for further details see Lindelöf (1901: §§71, 73). In the early Merc glosses /ø(:)/ generally remains, but occasional examples of unrounding can be found, such as ErfGl 391 *bēccāe* ‘beech’, 889 *gefēgnessi* ‘repairs’, CorpGl 569 *cellendre* ‘coriander’. In Ru1 /ø/ remains except in *mergēne* (1×) alongside *mærgēn*, *mærgēne* the *i*-umlaut of *marne*, see §5.34. With early shortening *bledsade*, etc. is more frequent than *gēbloetsad*. For /ø:/ Ru1 has a remarkable number of spellings indicating unrounding, approximately one-sixth of all instances being spelled ⟨ē⟩ (E. M. Brown, 1891: §54).⁶ In Ps(A) the only form regularly to show unrounding is *ele* alongside less frequent *oele*, note especially here *oexen* against Nbr *exen*. Other examples are merely sporadic.

¹ There are a very few spellings with ⟨ǣ⟩ for ⟨ōē⟩: CP 225.5 *onbrāeran* ‘stir’, Oros 258.10 *gedēmdē* ‘judged’, Bo 54.17 *gefæg* ‘joins’, MkGl(Ru2) 3.5 *gībāted* ‘made good’, Ru1 *wāstenne* ‘wilderness’ (3×), MtGl(Ru1) 24.6 *gedrāfde* ‘disturbed’, so too PsGl(l) 76.17, ÆLS 18.88. The significance of these forms is unclear. For the ⟨oi⟩ spellings of early texts see §2.18, and for Kt ⟨eo⟩ for ⟨oe⟩ see §2.17n1. Occasional ⟨eo⟩ spellings elsewhere are probably errors. They are especially common in Ru1, for example, *fēōd* ‘feed’, leading to *gedēōēmed* ‘judged’, *fēōerdun* ‘they travelled’.

² Most notable here are a number of examples in Nbr where pa.parts. of strong verbs show *i*-umlaut of */o/ due to variation of the inflexion, see §5.85(6). Examples are; Li *gēcnoeden* ‘kneaded’, *gēswoeren* ‘sworn’, *gēwoerden* ‘become’, *awoerpen* ‘thrown away’, Ru2 *gēbroecen* ‘broken’.

³ But the weak class 2 formative element */o:/ is always unrounded, see §5.74n2.

⁴ But CPHead 17 *weldōendum*, CP(C) 8.3 † *dōe* pr.part., pr. subj. of *dōn* ‘do’ are disyllabic analogical formations, see further §§5.133, 147.

⁵ *Cwōēn* is due to the *i*-umlaut of Gmc *ā + nasal, see §5.78(2).

⁶ In addition there are nine examples of various forms of *hēran* ‘hear’ with ⟨ōē⟩, which may suggest that /e:/ and /ø:/ had fallen together.

5.78 The developments of Gmc **a* + nasal and Gmc **ā* + nasal when subject to *i*-umlaut are different from one another, and hence are discussed separately below.

- (1) In the first instance, at least, Gmc **a* + nasal, which may by the time of *i*-umlaut have been a sound in the region of [ɛ] or [ɔ], see §§5.3–6, is, when umlauted, represented by ⟨æ⟩, presumably representing either [æ] or [œ], the equivalent front vowels. ⟨æ⟩ is a frequent spelling in the earliest texts: EpGl has 23× ⟨æ⟩, such as *aenid* ‘duck’, *aend* ‘and’ (< **andi*), *caempan* ‘soldiers’, against 9× ⟨e⟩, such as *embrin* ‘urn’, *emer* ‘bird’; similarly LRid has *cændæ* ‘he begot’¹ and ⟨æ⟩ is frequent in the proper names in BedeH. But very quickly the regular spelling becomes ⟨e⟩: thus ErfGl has 21× ⟨e⟩, 12× ⟨æ⟩, such as *end*, *cempan*, but *aenit*, and in CorpGl ⟨æ⟩ occurs only 3×, see for the above Pheifer (1974: §48). Even the very early CædH(M) has *end*. This would seem to indicate a very early raising of [æ] > [e] or a raising and unrounding of [œ] > [e].² For all other OE texts ⟨e⟩ is the regular spelling and ⟨æ⟩ is exceptional; nevertheless there are some texts which show a higher proportion of ⟨æ⟩ spellings than usual, such as Ru1 (E. M. Brown, 1891: §12a), WHom(C) (Whitelock, 1963: 40), ÆHom(F) (Pope, 1967–8: 181), and several of the WS psalter glosses, see Kimmens (1979: xxx) for full references, and for further examples see Vleeskruyer (1953: 9). Bülbring (1902: §171) suggested that ⟨æ⟩ spellings outside the earliest texts belonged to a south-east Saxon patois along the Kt border, but it now seems clear that these forms had a much wider distribution, and probably indicate localized failures to raise the sound as far as [e], cf. references immediately above.^{3,4} Typical examples of the normal OE developments are: **sandjan* > *sendan* ‘send’, **framman* > *fremman* ‘perform’.⁵
- (2) Gmc **ā* + nasal had at the time of *i*-umlaut probably developed only as far as [ɔɪ], see immediately below for discussion, and this would suggest that when umlauted it became [œɪ]. However, the regular spellings for the umlauted sound are ⟨ōē⟩ and ⟨ē⟩, following exactly the principles for the umlaut of **/o:/** outlined in §5.77, for example, WS, Kt *cwēman* ‘please’, Angl *cwōēman*, and so for *cwēn* ‘queen’, *wēn* ‘hope’.⁶ Similar forms occur where the nasal was lost due to sound changes in Gmc and the prehistory of OE, for example, *ēhtan* ‘persecute’, *gēs* ‘geese’, *nēpan* ‘venture’, *sēfte* ‘soft’, *smēpe* ‘smooth’,⁷ *tēþ* ‘teeth’. We may therefore assume a very early merger of [œ] with [ø:/. The evidence for assuming, however, that the original umlaut is of **[ɔɪ]* > [œ] comes from *bremblas* ‘brambles’ < Gmc **brāmil*, giving sg. *brēmel* and occasional *bræm(b)el*. The latter forms suggest that the original shortening was to the same sound as the umlaut of Gmc **a* + nasal, giving, see above, normal ⟨e⟩, occasional ⟨æ⟩, see also §5.79(1). This could only have happened if the umlauted sound were indeed **[ɔɪ]* rather than **[oɪ]*.

¹ Here Hoad (1978: 107) reads *cendæ* ‘with uncertain *e*’, in contrast to other editors, see Smith (1933: 44).

² The raising is a normal phonetic process for nasalized vowels, and is seen frequently in Gmc, see, for example, §§3.11–12. There is thus no reason to suppose the following nasal must have been strongly palatalized, as some writers have suggested, for example, Campbell (1959: §193d).

³ Although the contrast between EpGl, ErfGl, and CorpGl seems to show that ⟨æ⟩ is the early spelling, ⟨e⟩ the late spelling, it is possible that this reflects no more than sub-dialectal differences, cf. here the short Med 5.10 (Schaumann and Cameron, 1977: 306) which has only ⟨æ⟩ (2×) yet is close to, but later than, CorpGl.

⁴ The ME evidence suggests that [æ] persisted most frequently in Essex and parts of Middlesex, see Luick (1914–40: §363A2).

⁵ In *bærnan* ‘burn’ < **brannjan*, *ærnian* ‘run’ < **ramjan*, and probably *wærna* ‘wren’ alongside *wrenna*, *r*-metathesis has occurred before the nasalized vowel was raised, hence the vowel became oral and remained as [æ], see Stanley (1952), Hogg (1977b).

⁶ Ru1 has a few ⟨æ⟩ spellings, such as *cwæ̃n*, *cwæ̃mdon* ‘they pleased’, for which compare §5.77n1. Such spellings occur very rarely elsewhere. But *næ̃m* ‘taking’, *benæ̃man*, *genæ̃man* ‘deprive’ and related forms are most probably reformations of **nō̃m*, etc. due to the change of pa.pl. *nō̃mon* > *nā̃mon*, despite the dialectal problems, see Bammesberger (1979b) for a review of the evidence.

⁷ CorpGl 232 *unsmō̃pi*, ClGl 1.402 *unsmō̃pe* ‘rough’ are parallel to the ⟨u⟩ spellings of §5.75n1.

5.79 Although the developments of earlier */ɑ, ɑ:/ when subject to *i*-umlaut are phonetically parallel, their phonological characters are somewhat different, and therefore they are discussed separately below, the umlaut of the long vowel being discussed first.

- (1) In all dialects of OE earlier */ɑ:/ is umlauted to /æ:/, regularly spelled ⟨æ̃⟩.¹ It is probable that in all cases */ɑ:/ is due to the normal development of Gmc */ai/, see §§5.7–9,² and the *æ̃* which results from *i*-umlaut is usually known as *æ̃*₂ in order to distinguish it from *æ̃*₁, the normal development of Gmc */ɑ:/ in WS. Typical examples of the umlaut of */ɑ:/ are: *hæ̃lan* ‘heal’, cf. *hāl* ‘healthy’, *sæ̃* ‘sea’. Since the monophthongization of */ai/ was too late for the consequent */ɑ:/ to be influenced by a following nasal, see §§5.6–7, the *i*-umlaut of this */ɑ:/ is identical to the umlaut of the other examples of */ɑ:/, hence *æ̃nig* ‘any’, cf. *ān* ‘one’. But if /æ/ before a nasal is then subject to early shortening before a consonant cluster, then /e/ most usually results, due to raising before a nasal, see §5.78.1 and n2. Examples are: *endemes* ‘together’,³ *endleofan* ‘eleven’, *enwintre* ‘one-year-old’, Angl *enne* ‘one’ acc.sg.masc. against WS *æ̃nne*.⁴
- (2) When /i/ or /j/ stands in the next syllable, then, due to the earlier sound changes discussed in this chapter, Gmc **a* has usually developed to /æ/ by the time of *i*-umlaut, and, except before nasals, for which see §5.78(1), */ɑ/ is the normal phonological development only

before *l*-groups in the *a*-dialects, especially Angl, see §5.15, or by combinative breaking, see §5.31.⁵ To these contexts may be added examples of Latin loans containing Lat *a* but which were borrowed too late for first fronting to take place. However, it also appears to be the case that in a large number of words **/a/* could come to stand before */i, j/* due to various analogical developments, and it is then, of course, subject to umlaut to */æ/*. But the position is complicated by the fact that **/æ/* itself is not always umlauted, see §5.80 for further details. In some cases, therefore, the evidence may be ambiguous between umlaut of **/a/* and the failure of umlaut of **/æ/*. Such cases are indicated at the appropriate points below. Because of these complexities the various principal types of **/a/* and their umlauts are discussed separately below.

(a) *Failure of first fronting*: In the *a*-dialect areas forms such as **faljjan*, **aldira* occur at the time of *i*-umlaut, and they regularly umlaut to *fællan* ‘fell’, *ældra* ‘older’. Other examples of this change include *cwæلمان* ‘kill’, *mæltan* ‘melt’, *wælle* ‘well’.⁶ In Ru1, however, there is a minority of forms with ⟨e⟩, namely various forms of *belgas* ‘wine-skins’ (4×), *eldra* (3×), *cwelman*, *-heldan* ‘incline’.⁷ These spellings may be an early indication of a general shift to */e/* which occurs in these forms in all Angl dialects of ME except the WMidl, see Ekwall (1917b), Jordan (1974: §62).⁸ The same explanation probably holds for the even rarer examples of ⟨e⟩ in the early Merc glossaries, such as EpGl, ErfGl 818, CorpGl 1653 *-felge* ‘felly’, which can scarcely be due to the umlaut of **ea*, contra Pheifer (1974: §50.2).

(b) *Combinative breaking*: As discussed in §5.31, in Nbr and the early Merc glossaries **/æ/* is sometimes retracted to */a/* rather than diphthongized in breaking environments where there is a preceding or following labial consonant. In such cases the result of umlaut should be */æ/*, but instances of */æ/* are quite rare, either because of the sporadic nature of combinative breaking or because of development to */e/* as under (a) above. In Nbr examples are to be found in Li only in various forms of *hwærfa* ‘turn’, *undærfe* ‘useless’, *wærma* ‘warm’, *wærc* ‘pain’.^{9,10} The only certain instances in early Merc are EpGl 1091 *annaerdid* ‘damaged’, ErfGl 186 *haeruendlicae* ‘with contempt’, CorpGl 790 *færd* ‘army’, 517 *gægaerwendne* ‘preparing’ acc.sg.masc., 572 *gæuarpte* ‘he recovered’. Examples such as ErfGl, EpGl 111 *segilgaerd* more probably show the umlaut of retracted */a/* in weak-stressed syllables. In all these texts these forms are heavily outnumbered by forms such as *hwerfa*, *ferd*, etc.

(c) *Iterative umlaut*: Forms with **/a/* due to a following **/u/* which is umlauted to */y/* regularly have */æ/*, see §5.76 for full details.

(d) *Inflexional analogy*: In WS the variation between *a* and *æ* in strong class VI verbs was eliminated in favour of *a*, for example, *fare* ‘I go’, see §5.37(5). However, in 2,3sg.pr.ind. this /a/ is then umlauted to /æ/, hence *færst*, *færþ*. In Angl, forms such as *færeð* could theoretically have the same source, but since in those dialects *i*-umlaut is there regularly levelled, see §5.85(6), /æ/ is more probably due to the reverse of the process found in WS. Also to be noted here are various examples of *habban* ‘have’ with the sequence *-æbb-*, such as *hæbbe* ‘I have’.

(e) *Derivational analogy*: There is a considerable group of words which have related forms where in one case /i, j/ stands in the following syllable and in the other a back vowel stands in the following syllable, for example, *sæcc* ‘strife’ < **sakkjō* against *sacu* ‘strife’ < **saku*. It would appear that in such cases /æ/ due to first fronting has been levelled out and that here we have examples of *i*-umlaut of */a/. Forms parallel to *sæcc* ~ *sacu* include: *næss* ‘cape’ ~ *nasu* ‘nose’, *mæcġ* ‘man’ ~ *magu* ‘child’, *ġemæcċa* ‘companion’ ~ *ġemaca* ‘companion’, *wæcċe* ‘watch’ ~ *wacian* ‘watch’, *wræcċa* ‘exile’ ~ *wracu* ‘pain’. All these words, except *sæcc*, are also found with /e/ as the *i*-umlaut of unlevelled /æ/, that is, *ness*, *meġġ*, *ġemeċċa*, *weċċa*, *wreċċa*. Another group consists of words where the influence of related forms may be more suspect. Firstly, there are the denominal verbs *pæþþan* ‘traverse’, *stæppan* ‘step’, *stæþþan* ‘stay’, where /a/ could only have been restored on the analogy of nom.pl. *papas* ‘paths’, *stapas* ‘steps’, *stapas* ‘shore’.¹¹ Secondly there are deadjectival verbs such as *hwættan* ‘sharpen’, *lættan* ‘delay’, related to *hwatu* ‘active’ nom.pl.neut., *latu* ‘late’. Forms with /e/ for both groups include *steþþan*, *hwettan*, *lettan*. In view of the fact that *i*-umlaut of /æ/ does not appear to be consistently carried out, see §5.80, all the forms cited here are ambiguous, since they may be due either to levelling away of /æ/ or to failure of *i*-umlaut because of an intervening geminate, and neither explanation is exclusive of the other.¹²

(f) *Suffix variation*: In some words where there is variation between back and front vowels in an unaccented suffix, /a/ may have been taken over from positions before back vowels and then be subject to *i*-umlaut. Relevant examples include: *ræced* ‘hall’ (alongside *reċed*), *hæleþ* ‘man’ (alongside *heleþ*). It should be noted that these forms are exclusively poetical, and other forms with parallel *i*-umlaut are Angl, such as Nbr, Ru1 *gæfel* ‘tribute’ ~ *gafol*, EpGl, CorpGl *hæcid* ‘pike’ ~ *hacod*, EpGl, CorpGl *hæcile*, MtGl(Li) *hæcla* ‘cloak’ ~ *hæcele*. Hence it may be supposed that these forms are of nWS origin.¹³

(g) *Latin loan-words*: A number of Latin loan-words show /æ/ as the *i*-umlaut of Lat *a*, for example, *cæfester* ‘halter’ (< *capistrum*),

læden ‘Latin’, *mægester* ‘master’. The best explanation of such forms is that they were borrowed between the time of first fronting and the time of *i*-umlaut. Sometimes contrasting pairs can be found, one with *i*-umlaut of Lat *a*, such as *cæren* ‘sweet wine’, one with *i*-umlaut of Lat *a* as it develops through first fronting and other pre-umlaut changes, such as *cyren*. Other such pairs include Nbr *æced* against *ecēd* ‘vinegar’, EpFl *fæcīlæ* ‘torch’ against *fecele*.¹⁴

¹ In Angl, esp. Merc, there are indications that this /æ:/ was subsequently raised before dentals, although relevant ⟨ē⟩ spellings are always in a minority. Examples are: EpGl, ErfGl, CorpGl *blēc̄tha* ‘skin disease’, ErfGl *bēdendræ* ‘impelling’, *tēnil* ‘basket’, *urēni* ‘lasciviousness’, CorpGl *gēlēstunne* ‘accompany’, *-tēnel* ‘basket’. Ps(A) has a small number of such forms, as in *lēreð* ‘he teaches’, various forms of *forðrēstan* ‘afflict’, *alēdde* ‘he led away’, also *ūtlēdde* ‘he led out’, *gēbrēded* ‘dilated’, *flēsc* ‘flesh’. Ru1 has a considerable number of such spellings, proportionately more than other texts, and forms, or their derivatives, which occur more than once are: *ēr* ‘before’, *clēne* ‘clean’, *dēlan* ‘divide’, *hēlend* ‘Saviour’, *hwēte* ‘wheat’. In Nbr single instances of some of the above words occur: Li *flēsc*, *huuēte*, *gēlēred*, DurRitGl *clēne*, Ru2 *ēlc* ‘each’. Occasional forms in WS, such as CP 57.8 *kelēd* ‘led away’ are scarcely significant, and the same holds for forms not before a dental, such as ErfGl 681 *scīnlēcan* ‘wizard’, although it is unlikely to be due to Kt influence because of chronological difficulties. For the ME developments see Jordan (1974: §48).

² But Nbr *hwǣlc* ‘which’, *swǣlc* ‘such’, of variable length, probably show *i*-umlaut of **hwǣlik*, **swǣlik*, although their history remains problematic. WS *bræw* ‘eye-lid’, *lāwan* ‘betray’ could either show *i*-umlaut of */a:/ or merely unretracted /æ:/ before /wi/, paralleling the behaviour of /æ/ in the same position, see §§5.14n1, 5.24. The latter is the more probable, cf. PsGl(D) 10.5 *brēwas*.

³ If this is an example of *i*-umlaut, see §5.75.

⁴ The same process is not found with *nanne*, *nænne* ‘none’ acc.sg.masc.

⁵ MtGl(Ru1) *mærgen*, *mærgne* ‘morning’ dat.sg. also belong here, being the umlauted forms of *margen*, see §5.34. Note that such forms are occasionally found outside Angl, for example, ÆLS 3.344, 6.253 *mærgen*.

⁶ Ps(A) *welle* (2×) most probably shows original **e*, cf. ON *vella*, OHG *wella*.

⁷ But *elles* ‘else’, usually included here, has /ll/ due to WGmc gemination and thus shows normal *i*-umlaut of */æ/.

⁸ Both their geographical spread in ME and their total absence in Ps(A) exclude the possibility of /e/ due to second fronting, see further the discussion and references in §5.87.

⁹ WS *wærčan*, *wærç* alongside rare *wyrç* show borrowing of the Nbr form.

¹⁰ MkArgGl(Li) 1 *gēcærred* ‘turned’, alongside frequent *gēcærred*, etc. is of no significance here.

¹¹ *Stapas* shows reformation as an *a*-stem plural alongside *stepe* nom.sg. showing the original *i*-stem form with *i*-umlaut, see §5.85(2).

¹² A further example of the *i*-umlaut of analogical /a/ may be *gæst* (poet.), cf. nWS *gēst*, WS *giest*, Gen 1346 *gasta* gen.pl., but this could also be due to failure of *i*-umlaut, see §5.80. Despite the evidence of alliteration the quality of initial *g* is uncertain.

¹³ Note also ErfGl *gebil*, *hecele*, with *e* due to second fronting.

¹⁴ *Cælc* ‘cup’ against Ps(A) *celc* merely shows absence v. presence of second fronting and therefore should not be taken under here. *Calic*, with no palatalization, *i*-umlaut, or syncope, is a late Latin loan.

(b) *I-umlaut of front vowels*

5.80 The only front vowels to be affected by *i*-umlaut were the short vowels, see §5.74, and hence /æ:/ (nWS /e:/) was unchanged, for example, WS *dǣd* ‘deed’, *lǣce* ‘physician’, *mǣre* ‘famous’, nWS *dēd*, etc. On the other hand, */æ/ was in all dialects sometimes umlauted to /e/ but sometimes remained as /æ/. Since the different developments appear to be at least in part phonologically conditioned, the different relevant environments are discussed separately below.

- (1) When the intervening consonant or consonant group is a single or geminate consonant then */æ/ is regularly developed to /e/.¹ Typical examples include weak class 1 verbs such as: *herian* ‘praise’, *nerian* ‘save’, *werian* ‘clothe’, *wecgan* ‘move’, *wreþþan* ‘support’; strong verbs with weak presents, such as *hebban* ‘raise’, *sceþþan* ‘injure’; *i*-stem nouns such as *hege* ‘hedge’, *mere* ‘lake’, *mete*, *mett* ‘meat’; *ja*-stem nouns, such as *here* ‘army’, *bedd* ‘bed’, *secg* ‘man’; various other words, such as, *bet(e)ra* ‘better’.
- (2) When the intervening consonant group is non-geminate, then sometimes /æ/ remains, sometimes /e/ results.² Examples of words which regularly have /æ/ are: *æsc* ‘ash tree’, see §5.37(4), *æspe* ‘asp’, *fæstan* ‘make firm’, *mæstan* ‘feed on mast’, *hæftan* ‘bind’, *næglan* ‘nail’, *fæþman* ‘embrace’. Examples of words which regularly have /e/ are: *eft* ‘again’, *rest* ‘rest’,³ *egle* ‘troublesome’, *esne* ‘servant’, *stefne*, *stemm* ‘stem’, *hrefn*, *hremm* ‘raven’.⁴ Some words vary between /æ/ and /e/, such as *æfnan*, *efnan* ‘perform’, *stæfnan*, *stefnan* ‘regulate’, and, possibly, nWS *gæst*, *gest* ‘guest’, but see §5.79n12. The explanation of this apparently sporadic development is controversial. Luick (1914–40: §189A2) suggests that */i/ may have had a stronger influence on */æ/ than */j/, but this does not even explain weak class 1 forms, such as *fæstan*, where */i/ and */j/ would vary within the paradigm. Campbell (1959: §194) suggests analogical influence from unumlauted forms, parallel to the phenomena discussed in §5.79, but this neither explains all instances nor accounts for the regularity with which /æ/ is often found in many words. For criticism of both suggestions see further Girvan (1931: §72). It is much more probable that */æ/ was more resistant to *i*-umlaut than the back vowels and that therefore an intervening non-geminate consonant group could partially inhibit the change.

¹ Examples such as *færst* are explained by §5.79(2d) and examples such as *sæcc*, *stæppan*, *hwættan* are explained by §5.79(2e). As previously mentioned, forms before geminate consonants could theoretically be taken here, but the regularity of /e/ in, for example, *bedd*, *wreþþan*, argues against this.

² In those dialects where second fronting occurs /e/ is always found, but its source is always ambiguous between the operation of *i*-umlaut and second fronting. In Kt /æ/ is also regularly raised to /e/, see §§5.188–91, and the parallel ambiguity is therefore found.

³ But in Nbr both *rest* and *ræst* are found, so too the verb *resta*, *ræstan* ‘rest’. Such forms are found very occasionally elsewhere, for example, *ÆLet* 4.195 *ræst*.

⁴ See Campbell (1959: §193d,n4), and note also the very occasional *hræfn*.

5.81 Since */e/ before */i/ had already been raised to */i/ in Gmc, see §3.6, there could in OE be no examples of regularly developed */e/ in an umlauting environment. Analogical restoration of */e/, as suggested by Luick (1914–40: §190), Campbell (1959: §195), although possible, is not convincingly argued for, since it rests on a false parallel with analogical restoration of *a*. On the other hand, Angl *weorðes* ‘thou becomest’, etc. must show analogical introduction of *e*, since breaking of */i/ fails before a following /i/ in Angl, and there are no signs of combinative breaking, see further §§5.20, 29. The analogy is, therefore, evidenced. But if the analogy did take place there are never any signs of palatal diphthongization of restored */e/, see Girvan (1931: §71A3). Hence it is safest to assume that alternations such as *bere*, *birst* ‘I bear, thou bearest’ are due to the Gmc raising of */e/, although the possibility of *i*-umlaut of analogically restored */e/ cannot be excluded.

(c) *I-umlaut of diphthongs*

5.82 The *i*-umlaut of the diphthongs /æɑ, æǣ/ is in EWS regularly represented by ⟨īe⟩, and in LWS by ⟨ī, ȳ⟩, both probably developments of earlier /iy, iȳ/, see §§5.74, 164, and in nWS by ⟨ē⟩ (= /e(:)/).¹ Typical examples are as follows: (1) from /æǣ/ < Gmc */au/: WS *bīcnan* ‘beckon’, *ċīgan* ‘call’, *gēflȳman* ‘drive away’, *hȳran* ‘hear’, *gelȳfan* ‘believe’, *īġland* ‘island’, *nȳd* ‘need’, nWS *bēcnan*, etc.; (2) with */æɑ/ < */æ:/ by breaking: WS *nīht* ‘next’, see §5.23 for nWS *nēst*; (3) with /æɑ/ by palatal diphthongization: WS *ċȳse* ‘cheese’ < **ċīese*, see §5.72; (4) with /æǣ/ < */æ/ by breaking: WS *hlihhan* ‘laugh’, *nīht* ‘night’, *ċirran* ‘turn’, *fȳrd* ‘army’, *ȳldra* ‘older’, *gēwȳldan* ‘subdue’, nWS *hlehhhan*,² *neht*, *ċerran*, *ferd*,³ Kt *eldra*, *gēweldan*.⁴

¹ But -ē- can be found in a small minority of EWS forms, for example, occasionally in *dēġle* ‘secret’, *gēman* ‘care for’, *lēfan* ‘allow’, and a few other words. This is no doubt merely a sign of Merc influence on EWS. In early manuscripts of Bede (æ) spellings can be found, which are purely graphic, see Luick (1914–40: §194A2), and similar spellings in Ru1 merely show confusion of ⟨æ⟩ and ⟨ē⟩.

² Angl *hlæhas*, *hlæhað*, etc. lack *i*-umlaut, cf. WS *bleahtor* ‘laughter’.

³ For Angl forms with combinative breaking and *i*-umlaut see §5.79(2b).

⁴ For Angl forms with failure of first fronting, see §5.79(2a). It is noticeable, however, that in those EWS texts which show signs of being (influenced by) an *a*-dialect, see §5.15, the *i*-umlaut is almost always of *ea*, for example, Chron(A)Hand(A), CP, Oros

ieldra. Instances of *æ* are to be found only in the personal name *Ælfred*, which was fossilized in its Merc form, and other instances of the name-element *Ælf-*, cf. EWS *iel̥f* ‘elf’. Occasional examples with *-e-*, no doubt the Angl *i*-umlaut of *ea*, can be found, such as CP(C) 118.17 † *geweldan*, CP(H) 447.9 *welm* ‘fountain’, but it would seem clear that in these dialects *ll*, when followed by *i*, *j* in the next syllable, was not normally sufficiently velarized to prevent first fronting.

5.83 In WS only the *i*-umlaut of **/io, iō/* is regularly represented by EWS *⟨īe⟩*, LWS *⟨ī, ȳ⟩*.¹ For the phonology of this change see §5.74 and n6. This holds for all cases, regardless of origin or length. Typical examples are as follows: (1) with **/io/* < Gmc **/iu/*: *bȳt* ‘he commands’, *cȳst* ‘he chooses’, *lihtan* ‘lighten’, *onsȳn* ‘face’, *gestȳran* ‘steer’; (2) with **/io/* < **/iu/* by diphthongization in Gmc, see §3.19, *fȳnd* ‘enemies’, *frȳnd* ‘friends’; (3) with **/io/* by breaking of **/i:/* before */x/*:² *lȳhtan* ‘alleviate’, *wrihþ* ‘he covers’ and similarly other contracted verbs of strong class I; (4) with **/iō/* by breaking of **/i/* before */r/* + consonant: *byrhto* ‘brightness’, *afyrrian* ‘drive out’, *yrre* ‘anger’, *wyrsa* ‘worse’, *wyrð* ‘he becomes’.³ In nWS */io, iō/*, wherever they occur,⁴ remain unaffected by *i*-umlaut, hence *bīot*, etc., except where later changes intervene, cf. Kt *-sīohð* ‘he sees’ against Ps(A) *gesīð* by Anglian smoothing.⁵

¹ For cases where */io/* appears to remain unchanged or become */eo/* see §5.84.

² EWS examples with *⟨īe⟩* are lacking in this type and must be inferred.

³ Cf. here Angl *weorðes*, etc., discussed in §5.81.

⁴ But note that */io, iō/* do not always occur in all types in nWS. This is particularly the case where */iō/* is due to breaking before */r/* + consonant, which in Angl fails before a following */i/*, see §5.20.

⁵ But in Ps(A) there are a considerable number of *⟨īe⟩* spellings reminiscent of EWS, notably frequent *onsīen* ‘face’, cf. Nbr *onsīon*. Björkman (1914) suggests that the form is disyllabic and is a reformation on the pattern of other words formed by a verbal stem + *-en* suffix, such as *lufen* ‘joy’, *selen* ‘gift’. A similar disyllabic structure probably accounts for *gesīe* ‘I see’, etc. and *fienda*, *fiendum* ‘enemies’ gen.dat.pl. PsGl(A) 30.21 *gedīeda* ‘languages’ gen.pl. is probably an error.

5.84 Just as **/e/* could not stand before a following **/i, j/*, see §5.81, so too **/eo, eō/* could not regularly stand in the same position. As with **/e/* there is no firm evidence to prove that an analogically developed **/eo, eō/* has been subject to *i*-umlaut, but the behaviour of the other diphthongs suggests that if this did happen, then the *i*-umlaut of **/eo, eō/* would be to EWS *īe*, LWS *ī, ȳ*, and nWS *īō*, these results being identical with the *i*-umlaut of **/io, iō/*.¹ Hence EWS² *eldīediġ* ‘foreign’, *ġepīedan* ‘join’, *stīeran* ‘steer’ alongside *eldēodiġ*, *ġepēodan*, *stīoran* show *i*-umlaut of either **/io/* or **/eo/*, and because of the interchangeability of the diphthongs the issue is not decidable. The forms *leornian* ‘learn’, *lēode* ‘nation’, *ġepēode* ‘language’ never show *i*-umlaut, nor do *heordan* ‘hards of flax’, *ġereord* ‘voice’, *ġereord* ‘food’, where **/iō/* could never have occurred, see §§3.20–1. But many

unumlauted forms are no doubt due to the analogy of related forms, such as *þēod*, *stēor*, *leornaþ*, *reord*.³ In Nbr, the only dialect which regularly preserves the distinction between *ǐō* and *ǐo*, see §5.159, the forms of *leornia* are inconclusive, for Li prefers ⟨eo⟩ and Ru2 prefers ⟨io⟩, see Sievers (1900: 33–4). But the strong preference displayed in those texts for *geriord*, *riord*, etc., see Campbell (1959: §124n4), suggests that in this dialect */*ǐō*/ at least was *i*-umlauted to */iō/*.

¹ The claim of Sievers (1900: 44–5), supported by Campbell (1959: §202), that */*eo*, *ǐō*/ was sometimes *i*-umlauted to */io*, *iō*/ in WS is phonologically improbable, given that the *i*-umlaut of */*æa*, *ǣa*/ was originally to the sounds represented by *ǐē*. It is also unnecessary, since it merely substitutes for the analogical levelling of *i*-umlaut the analogical levelling of the Gmc raising of */*e*/ > */*i*/. We may therefore dispense with this special development, which Sievers called *Halb-Umlaut*.

² In LWS only *stýran*, alongside infrequent *stēoran*, regularly shows *i*-umlaut in the texts of Ælfric and Wulfstan. For the other words ÆCHom I 506.10 has *gēþýde* ‘joined’, and the only example of unumlauted *elþēodig* is the less reliable PsGl(E) 38.13 *elþidig*.

³ There is no obvious analogical base for *beordan*, but the form need never have been subject to *i*-umlaut, see §3.21n2.

(d) Summary

5.85 As was said in §5.74, *i*-umlaut is one of the most important and thoroughgoing sound changes in the history of OE. Consequently there are many areas where the change has important morphophonemic implications, and the most important of these are discussed below.

- (1) *i*-umlaut distinguishes *ja*- and *jō*-stem nouns from the corresponding *a*-, *ō*-stems, so that all the former show unumlauted stem vowels, such as *here* ‘army’, *seċġ* ‘man’, *cynn* ‘race’, *yrfe* ‘inheritance’, *synn* ‘sin’, *ýþ* ‘wave’.¹
- (2) Most *i*-stem nouns² should show *i*-umlaut throughout their paradigm, but if they have transferred to the *a*- or *ō*-declension before the time of *i*-umlaut then unumlauted forms will occur, hence *meaht* ‘might’ alongside *miht*, *stapas* ‘steps’ alongside *stepe* ‘step’, *gasta* ‘guests’ gen.pl., see §§5.79, 80.
- (3) A number of *a*-stem nouns,³ especially in early texts, apparently show an inst.sg. in *-i*, such as RuneThornhillC *on berġi* ‘on a mound’, but in all cases except the adverbial forms *ǣne* ‘once’, *hwene* ‘a little’ *i*-umlaut has been levelled away, at least to the extent that such examples are genuine, see n3 and §6.53 and n1.
- (4) Masc. athematic nouns should show *i*-umlaut in the dat.sg. and the nom.ace.pl., for example, *mann* ‘man’, but *menu* dat.sg., nom.acc.pl. Similarly, fem. athematic nouns should show *i*-umlaut in the gen.dat.sg.

and nom.acc.pl., for example, *bōc* ‘book’ but *bēc* gen.dat.sg., nom.acc.pl. But *i*-umlaut is often levelled away, for example, *bōce* gen.sg., although in the case of WS *niht* ‘night’ especially it can be extended. The same variation is to be seen in the (masc.) *nd*-stems, for example, *frēond* ‘friend’, *frýnd* ‘friends’. Similarly the *r*-stem nouns such as *fæder* ‘father’ should show *i*-umlaut in the dat.sg., for example, *dēhter* ‘daughter’ dat.sg.; occasionally this is extended to the gen.sg., for example, Ps(A) *dōēhter*, and, rarely, to the plural, as in Ru1 *brōēþre* ‘brothers’. But usual *fæder* dat.sg. shows levelling.

- (5) A group of common adjectives show the comp. and sup. with *i*-umlaut, such as *lang* ‘long’, *lengra*, *lengest*.
- (6) In the 2,3sg.pr.ind., pa.subj. and pa.part. of strong verbs, the last only occasionally, see below, a following **/i/* should cause *i*-umlaut of the root vowel where possible, but in fact the distribution of umlauted forms is different for each of the three categories. In the 2,3sg.pr.ind. *i*-umlaut should occur in regular verbs of classes II and VI, in many verbs of class VII, and in an additional few verbs such as *cuman* ‘come’. Hence are found: *cýst* ‘thou chooseth’ against *cēose* ‘I choose’, *færst* ‘thou goest’ against *fare* ‘I go’, see §5.37(5), *filst* ‘thou fallest’ against *fealle* ‘I fall’, and many similar examples. But in Angl the *i*-umlaut is usually levelled away, for example, *cēoses*, etc.⁴ In the pa.subj. the *i*-umlaut is almost always levelled away, but it is evidenced in a few pret.-pres. verbs, most frequently in *scýle* ‘shall’ pr.subj.sg. alongside *scúle*. In the pa.part. the ending **-in* was in competition with more frequent **-an*, but a few forms nevertheless show *i*-umlaut, such as EWS, LWS *cymen* ‘come’.
- (7) In classes V–VII a few verbs show formative **/j/* before the endings of the present tense only, and hence are known as weak presents. Such verbs show all the characteristics of weak class 1 verbs in their present tense, including *i*-umlaut: typical examples include *biddan* ‘ask’,⁵ *hebban* ‘raise’, *wēpan* ‘weep’.
- (8) Weak class 1 verbs formed their present tense with the formative **/j/*, and have **/i/* as a connecting vowel in the preterite. Hence they show *i*-umlaut throughout the paradigm, for example, *fremman* ~ *fremede* ‘perform’, *dēman* ~ *dēmede* ‘judge’. But a small group of weak class 1 verbs form their preterite without a connecting vowel, and thus show an alternation between an umlauted stem vowel in the present and an unumlauted stem vowel in the past, such as *cwellan* ~ *cwealde* ‘kill’, *þencan* ~ *þōhte* ‘think’. But, especially in WS, if the *i*-umlaut in such verbs is of a low vowel then the change is often analogically extended to the preterite, for example, *rehte* ‘narrated’ against *reahthe*, cf. *reccan*, *tæhte* ‘taught’ against *tāhte*, cf. *tēcān*. Such extension of *i*-umlaut occurs only if the verbal stem ends in

/x/. Since weak class 2 verbs have the formative */o:ɨ/ in many parts of the present tense, */o:/ elsewhere, the stem vowel is always unumlauted. Hence it might be thought that *i*-umlaut of the stem vowel was a diagnostic for weak class 1 against weak class 2, but the transfer in LWS of such weak class 1 verbs as *nerian* 'save' to weak class 2 shows that the diagnostic was by this time at least no longer synchronically valid. Note, of course, that */o:/ in */o:ɨ/ was subject to *i*-umlaut, becoming */e/ in all dialects with later raising to */i/, see §6.52.

- (9) Weak class 3 verbs should show *i*-umlaut in many parts of the paradigm, but the system is prone to much irregularity and analogy. For a full discussion of such forms see Campbell (1959: §§762–3), also §5.79(2d).
- (10) There are many cases where *i*-umlaut does or should distinguish words which are derivationally related, see §5.79(2e). Of special interest are derived forms with a suffix containing /i/, of which the following types are the most important.

(a) Words with the suffixes *-iht*, *-in* (> *-en*), *-ing*, *-isc* normally, and with the suffix *-incel* always, do not show *i*-umlaut, hence *stāniht* 'stony', *lēaden* 'of lead', *earming* 'wretch', *folcisc* 'popular', *hūsincel* 'little house', cf. *stān*, *lēad*, *earm*, *folc*, *hūs*. Some of these forms appear alongside forms with *i*-umlaut, such as *stæniht*, *yrming*, and some almost always show *i*-umlaut, such as *gylden* 'golden', *mennisċ* 'human'.⁶ Unumlauted forms are either reformations on the base of the simplex, such as *stāniht*, or post-*i*-umlaut formations, such as *folcisc*, see also §5.85(11).⁷ The dual pers.pron. *ūsic* 'us two' has suffixal *-iċ*, but never shows *i*-umlaut, presumably on the analogy of the simple plural *ūs*.

(b) The suffix *-ig* is developed from both */ij/ and */æj/, cf. EpGl 615 *hunaeg-*, ErfGl 615 *huneg-*, CorpGl 1214 *hunig-*, and if it is from the latter then unumlauted forms appear, such as *bodig* 'body', *hālig* 'holy', *meahtig* 'mighty', *moniġ* 'many', *stāniġ* 'stony', *sundriġ* 'separate' (rare), *þurstig* 'thirsty'. Umlauted forms are frequent for *mibtig*, *syndriġ*, and are occasionally found in *mæniġ*, *meniġ*, but are otherwise rare or non-existent.⁸

(c) The suffixes *-nes(s)*, *-nis(s)* are variously derived from **-nassi*, **-nissi*, **-nussi* and hence sometimes show *i*-umlaut, sometimes not. Generally speaking LWS does not show *i*-umlaut, EWS occasionally does, and Angl regularly does, thus LWS *untrumnesse* 'weakness', EWS *untrumnesse*, *untrymnesse*, Ru2 *untrymnisse*, Nbr *untrymmis(s)e*.

(d) The suffixes *-el*, *-en*, *-er* are partly from Gmc */il, in, ir/, cf. §5.85(10a), and partly due to OE epenthesis, see §§6.38, 42. In the

former cases *i*-umlaut is regular, for example, *yfel* ‘evil’, *yldra* ‘older’, but in the latter epenthesis is too late to cause *i*-umlaut, for example, *æppel* ‘apple’, *ofen* ‘oven’, *æcer* ‘acre’.

(e) The second elements of compounds normally contained suffixal **i/* and should therefore show *i*-umlaut, but umlauted and levelled forms often appear side by side, such as *ānīge* ‘one-eyed’ beside *ānēage*, see too §5.76, *fīperfēte* ‘four-footed’ beside *fīperfōte*, *twībēte* ‘doubly compensated’ beside *twībōte*.

- (11) If the first element of a compound is an *i*-stem, it might be expected that it should show *i*-umlaut, paralleling the simplex, but if the first syllable is long then **i/* is lost before the time of *i*-umlaut, hence *nēadþearf* ‘necessity’ beside more frequent *nȳdþearf*, *samcucu* (< **sāmi*-with early shortening) ‘half-dead’, CorpGl 799 *sculthēta* ‘bailiff’ beside many compounds with first element *scyld-*, JnGl(Li) 13.33 *uuscbearn* ‘adopted son’. The same phenomenon is found less often with short syllables, but note frequent *ælpēodig* ‘foreign’ beside *elþēodig* and *hup(e)ban* ‘hip-bone’, *hup(e)seax* ‘dagger’ beside *hypeban*, *hypeseax*. The frequency of umlauted forms in all the above cases may also be due to reformations on the analogy of the simplex forms.⁹

It should be clear from the above that despite the fact that *i*-umlaut can be clearly observed in a great many morphophonemic alternations, it is nevertheless the case that it is frequently subject to morphological conditioning in the synchronic grammars of OE dialects. It is therefore difficult to suppose that phonological accounts of OE which assume a general synchronic rule of *i*-umlaut, such as Wagner (1969), Lass and Anderson (1975), can be fully justified.

¹ Obviously many such nouns will also be distinguished by gemination, such as *cym*, but, equally obviously, this is not a sufficient distinction, especially after degemination of final geminates, see §§7.80–1.

² But some *i*-stem nouns are originally *-es-*, *-os-*stems, and if these have a heavy stem syllable there is usually variation between umlauted and unumlauted forms, such as *gebenn*, *gebann* ‘proclamation’. In the case of *gēcycnd* ‘nature’, however, unumlauted forms are extremely rare.

³ Three fem. *ō*-stem nouns show *-i* for the instr.sg. but without *i*-umlaut: RuthCr 3 *rōdi* ‘cross’, RuneAuzon 4 *-cæstri* ‘city’, EpGl *gitiungi* ‘preparation’, to which may be added EpGl, ErfGl 109 *meġsibbi* ‘kinsman’, a *jō*-stem. If *-i* is genuine, see §6.53n1, the *i*-umlaut must have been levelled away.

⁴ But forms of *cuman* are especially resistant to the levelling of *i*-umlaut, for example, Ps(A) *cymes* ‘thou comest’, etc., and in Angl the umlauted forms are often extended.

⁵ Technically, of course, the class V verbs have Gmc raising of **i/*, see §3.6, rather than *i*-umlaut.

⁶ *Manniscum* dat.pl. occurs at HomM 5.110 and Solil 1 27.15.

⁷ In Nbr the element *-wiht* is reduced to a suffix, appearing as *-iht*, and causes *i*-umlaut in *ǣniht* ‘anything’, *nǣniht* ‘nothing’, cf. WS *nānwiht*, which remains as a compound and hence does not show *i*-umlaut, see §5.74n2.

⁸ Thus *hǣliġ* is restricted almost entirely to Ps(E), *stǣniġ* occurs three times in ÆCHom II 6 and in some texts in Bald’s *Leechbook*, and *þyrstig* is restricted to Nbr.

⁹ It may also be the inverse of the failure of *i*-umlaut in many compound words, see §5.74n2.

5.86 The chronology of *i*-umlaut with respect to the major early sound changes such as breaking and palatal diphthongization has already been discussed, see §§5.33, 46, 72–3. For the relative chronology of *i*-umlaut and second fronting see §5.92. Since front vowels due to *i*-umlaut can then be subject to back umlaut because of suffix variation, see §§5.79ff., as in **ǣsil* > **esel* > *esol* > *eosol* ‘ass’, it is clear that *i*-umlaut is the earlier change, and the fact that *i*-umlaut is complete by the time of the earliest texts whereas both smoothing and back umlaut are not always carried through is further confirmation of the relative chronology of *i*-umlaut. More difficult is the relation of *i*-umlaut and palatalization. On the one hand, velar consonants are not palatalized before front vowels due to *i*-umlaut, hence *cēne* ‘bold’, *gēs* ‘geese’, *cǣġ* ‘key’, *gǣlan* ‘hinder’; on the other hand /j/ which is the result of palatalization of earlier */ɣ/, as in *dǣġ* ‘day’, does not cause *i*-umlaut. The evidence clearly conflicts, and even if the further evidence of palatal diphthongization is taken into consideration, see §5.72, there is no immediately obvious solution, see Hogg (1979b). However, Colman (1986) has argued that syllable structure constraints, such that the umlauting and umlauted sounds must not be in the same syllable, would block *i*-umlaut in *dǣġ* but not in *cǣġ*, and the argument is appealing. In this context it is probably safest to assume that the two changes of palatalization and *i*-umlaut were very closely related chronologically but with palatalization as the slightly earlier change. Yet the possibility of some chronological overlap cannot be entirely excluded.

VII Second fronting

5.87 In the West Mercian dialect typified by the language of the *Vespasian Psalter Gloss* (Ps(A)), ⟨e⟩ and ⟨æ⟩ are found where other dialects have ⟨æ⟩ and ⟨a⟩.¹ Hence we find *deġ*, *dǣgas* ‘day, days’ rather than usual *dǣġ*, *dagas*. Since these changes bear a clear resemblance to the first fronting of Gmc **a* > *æ* they are together known as second fronting. The changes proceed regularly in all environments except that of a following velarized [ɫ],² where no change takes place, for example, *ǣldra* ‘older’ < **aldra* by *i*-umlaut, see §5.79n2, *hwalas* ‘whales’. It may also be supposed that a following /w/ would prevent second fronting, although there are no relevant

examples, see Luick (1914–40: §179 and A1). In these circumstances the change can be seen to be prevented by an immediately following back sonorant. One continuing matter of controversy is whether the shift of /æ/ is to /e/ or to [ɛ], and if to the latter what the phonemic status of [ɛ] might be. The view that the shift was more or less directly to /e/ is held by d'Ardenne (1936: 181–6), Dobson (1972: lxxiii, n1), and Hogg (1977a: 72) amongst others; Zettersten (1965: 66–71) and Kristensson (1983, 1986a, 1987: 39–42), following and building upon Ekwall (1963), argue that [ɛ] developed as an allophone of /æ/, whilst Jack (1990) argues that /e/ was a new phoneme which persisted throughout the OE period. The argument, which is based on the development of ME place-names, is by no means concluded, and the view presented here, but with alternatives mentioned where appropriate, is that the shift was of /æ/ > /e/. In those circumstances we may approximately characterize the process of second fronting as:

$$\left[\begin{array}{c} \text{V} \\ \langle \text{-back} \rangle_a \end{array} \right] > \left[\begin{array}{c} \text{-back} \\ \langle \text{-low} \rangle_b \end{array} \right] / \text{ ————— } \left\{ \begin{array}{l} [+obst] \\ [-back] \end{array} \right\}$$

Condition: if a, then b.

¹ In older works these changes are often associated with Kentish raising of \ddot{a} , see §§5.189–91, for example, Bülbring (1902: §91), Luick (1914–40: §§178–81), Girvan (1931: §87), Brunner (1965: §52). For arguments against this see Campbell (1959: §290), Ball (1962: 130), Hogg (1977a: 74–5).

² The precise conditions under which [t̪] rather than [l] appears are difficult to determine. But the operation of first fronting, (§5.15), and breaking, (§§5.16n2, 5.22), suggest that [t̪] < Gmc *t̪ remains velarized in the immediate environment of a back vowel, see further d'Ardenne (1936: 185), Hogg (1977a: 78), or when covered by a following consonant.

5.88 Earlier */æ/ is raised to /e/ with great regularity in Ps(A), typical examples being:¹ *bec* 'back', *feder* 'father',² *fet* 'vessel', *hefde* 'had', *seġde* 'said', *weter* 'water'; the pa.sg. of strong verbs of classes IV and V, such as *aber* 'I carried away', *sprec* 'he spoke', *wes* 'he was'; imp.sg. and pa.parts. of strong verbs of class VI, such as *fer* 'go!', *ġesċepen* 'created'. There is one example of raising before [l], namely Ps(A) 39.11 *hel* 'he concealed'.³

¹ But in positions of weak stress the raising is not always carried through, hence *æt* 'at', *cwæð* 'he said', *ðæs*, *ðæt* forms of the dem.pron., *wæs* are found alongside *et*, etc. Other exceptions, such as Ps(A) 55.5 *dæg*, 2.9 *fæt*, are of no significance.

² Alongside *feadur*, see §5.89.

³ Examples of failure of raising before velarized [t̪] are found with /æ/ as the *i*-umlaut of */a/, for example, *ældra* 'older', see §5.87.

5.89 Earlier /a/ is fronted to /æ/ with great regularity in Ps(A), typical examples being of cases where /a/ is due to restoration of *a*:^{1,2} *dræca*

‘dragon’, *hræce* ‘throat’, *mægon* ‘they may’, cf. *mæg* ‘he may’, *wræca* ‘vengeance’ gen.pl., and various class 2 weak verbs: *cwæcian* ‘quake’, *plægian* ‘play’,³ *wæcian* ‘watch’. But except before velars this /æ/ is subject to back umlaut, see §5.106, and develops to /æa/ (<ea>). Hence we may infer from *featu* ‘vessels’, *feadur* ‘father’, *geatu* ‘gates’, *heafuc* ‘hawk’ etc. earlier **fætu*, **fædur*, **gætu*, **hæfuc* and many other forms.⁴

¹ As with raising of /æ/, this fronting is not always carried through in positions of weak stress, hence regular *ab* ‘but’. This may also be the explanation of the present tense forms of *habban* ‘have’, such as *habbað*, *hafast*, *hafað*, although as with forms of this verb in other dialects there may have been a desire to differentiate maximally *habban* and *hebban* ‘raise’. Other exceptions, such as Ps(A) 73.13, 14 *draca*, 17.39 *magun*, are rare and of no significance.

² But note that /a/ from Gmc **a* + nasal is in this dialect [ɔ] and not subject to second fronting, for example, *mon* ‘man’. See further §5.5.

³ Originally a class 3 verb, transferred to class 2.

⁴ Examples of failure of fronting before velarized [ɰ] are: *ald* ‘old’, cf. *ældra*, *haldan* ‘hold’, *hwalas* ‘whales’, *wyrwtalan* ‘roots’, and forms of *galan* ‘sing’.

5.90 Outside the dialect of Ps(A) the above changes are only occasionally seen, but the raising of /æ/ is more widespread than the fronting of /a/. In the earliest Merc glossaries EpGl and the less reliable ErfGl both show /e/ < /æ/ only in 106 *sceptloun* ‘launching straps’ dat.pl. and 558 *mer(e)* ‘monster’, and in addition each glossary has a small number of examples particular to itself, see Pheifer (1974: §38). CorpGl has rather more examples, the ratio of <æ>: <e> being approximately 5:1, for discussion and examples see Kuhn (1939: 14–15), also Wynn (1956: §§1–3, 47–8). Ru1 has a minority of <e> spellings, as in *efter* ‘after’ (1×) against *æft(er)* (32×), *sprec* ‘he spoke’ alongside more frequent *spræc*, *cweþ* ‘he spoke’ (15×) against *cwæþ* (165×) (E. M. Brown, 1891: §1c). In the later OccGl 54 and LS 3 (Chad) <e> is the usual spelling, and unraised <æ> is found only in a minority of forms. The evidence of the later texts accords well with the evidence of the ME ‘AB dialect’, see d’Ardenne (1936), Dobson (1972), and we may therefore suppose that the dialect of Ru1 was marginal to the second fronting area. The language of the early glossaries is more ambiguous, since it may reflect either a dialectal or a chronological distinction, see §5.92. In the Merc glossaries the fronting of /a/ is perhaps more common than the raising of /æ/ and forms with <æ> or <ea>, see §5.89, are frequently found alongside forms with <a>, see Pheifer (1974: §§46, 56), Kuhn (1939: 12–13) for details. But in the other texts mentioned above this fronting is never seen, except in occasional forms of no significance. Outside Merc both changes are quite absent.

5.91 The only morphological alternations which could arise as the result of second fronting would be due to the presence or absence of an immediately following velarized [ɰ] according to whether or not that liquid was followed

by a back vowel. There are, however, no clear-cut examples of this, see Hogg (1977a: 80). Alternations such as *deġ* ~ *dægas*, *meġ* ~ *mægon* are, of course, due to restoration of *a*, not second fronting.

5.92 The relative chronology of second fronting has been a source of considerable disagreement. Thus d'Ardenne (1936) and Ball (1962) have argued for a date no later than restoration of *a*, Luick (1914–40: §181) and Campbell (1959: §253) suggest that it immediately preceded *i*-umlaut, so too Kristensson (1986a: 455–6), whilst Girvan (1931: §89A2) and Hogg (1977a) claim that it immediately followed *i*-umlaut, and Kuhn (1939) argues that it was roughly contemporaneous with back umlaut. ME evidence shows that where /æ/ is due to second fronting, as in *gætu* 'gates', *cæfertūn* 'hall', there is no palatalization of the initial velar, and hence second fronting must have followed palatalization. Further, since /æ/ by second fronting is subject to back umlaut where appropriate, see §5.89, it seems clear that second fronting must be the earlier change. These two points confine second fronting to a relative time almost contemporaneous with *i*-umlaut, and indeed Colman and Anderson (1983) argue that second fronting was merely a sub-part of the *i*-umlaut process. The argument for an earlier date rests upon the supposition that if second fronting were later than *i*-umlaut, then *ældra* < **aldira* might be expected to raise to ***eldra* (or, at least **⟨eldra⟩, for the phonemic interpretation is irrelevant), because the /l/ would by then be develarized. But if second fronting were the earlier change [ɿ] would still be velarized at the time of *i*-umlaut, second fronting would not take place, and *i*-umlaut would shift **aldira* > *ældra*. But there is no reason to suppose that [ɿ] would be develarized by *i*-umlaut, and the argument is thereby much weakened.¹ On the other hand, proponents of a later date for second fronting argue that if second fronting were early, then **bæddj-* would give **beddj-* and then that *i*-umlaut of */e/ would give ***bidd* rather than *bedd* 'bed'. The reverse chronology would clearly give *bedd*. This argument rests on two assumptions: firstly that */e/ can be subject to *i*-umlaut, see §§5.81, 84; secondly, that the second fronting of /æ/ was /e/ rather than /ɛ/. As such, this argument can be no stronger than the previous one. To the theoretical arguments we may add the fact that the Merc glossaries show only sporadic examples of second fronting, see §5.90. This could be due to the sound change not having been fully implemented at the time of the writing of the archetype (late seventh century). But even here an alternative argument from dialect differences is possible. The relative chronology of the raising of /æ/ and the fronting of /a/ is equally difficult. The latter change cannot have preceded the former, since in that case the resulting /æ/ would have been raised. But the two changes may either have been simultaneous or the raising may have occurred first, thereby instituting a drag chain. The evidence of the various texts is either inconclusive or contradictory.^{2,3}

¹ The often-quoted form *læran* 'teach' is irrelevant, since the stem vowel is long, and second fronting affects short vowels only.

² Thus the evidence of §5.90 suggests that in the dialect of the early Merc glossaries the changes were simultaneous, since they occur with similar frequency, but the absence of fronting of /a/ in the other Merc texts, even those like LS 3 (Chad) which show regular raising of /æ/, suggests that the changes were quite separate, with the fronting of /a/ the result of a drag chain which was dialectally very restricted.

³ Dresher (1980) argues for a quite different view of second fronting whereby in essence the fronting of /a/ was the consequence of the loss of a synchronic rule corresponding to restoration of *a*, cf. Ball (1962), but otherwise adopting the view of Kuhn (1939). But his argument rests crucially on the validity of the generative concept of rule loss, a discussion of which is outside the scope of this work.

VIII Anglian smoothing

5.93 In the Anglian dialects of OE,¹ at or shortly before the time of the earliest texts, see further §5.102, the short and long diphthongs /iū, iu, eō, eo, æā, æa/ of whatever source were monophthongized when followed, either immediately or with an intervening liquid, by the velar consonants /k, x, ȝ/. The monophthongizations are as follows: /iū, iu/ > /i, i:/, /eō, eo/ > /e, e:/, /æā/ > /æ/ with later raising to /e/ before liquids, see below and §5.98, /æa/ > /e:/, in some texts /æ:/, see §5.99. Thus we find contrasts between, for example, Ps(A) *birhtu* 'brightness' (see, however, §5.94), *betwīh* 'between', *werc* 'work', *nēh* 'near' (< **nēoh* with breaking of */e:/ = æ₁), *mæht* 'might', *merg* 'marrow', *hēh* 'high', and WS *birhtu* (< EWS *bierhtu*), *betwīoh*, *weorc*, *nēah*, see above, *meaht*, *mearg*, *hēah*.² This process of monophthongization, termed 'smoothing' by Sweet (1888: 22), which was later translated into German as 'Ebning' by Bülbring (1899a: 3),³ has continually posed difficulties for OE scholars, and the explanation offered below can be no more than tentative. The major difficulty is well exemplified by the history of Angl *nēh*. For this word we can postulate proto-OE **nēh*, which by breaking is diphthongized to **nēoh*, see §5.23, since ⟨h⟩ represents /x/, but **nēoh* is then, by smoothing, monophthongized back to *nēh* before, apparently, the same consonant, cf. *nēowest* 'nearest' and other derived forms where /x/ is lenited and lost before smoothing. The changes of breaking and smoothing appear to be phonologically contradictory, and this has led some scholars, notably Brunner (1965: §119A1), to suppose that smoothing was a largely orthographic change, in other words that Angl scribes felt that it was unnecessary in the relevant forms to signal the diphthongal pronunciation. But in that context the regularity of the monophthongal spellings in Angl, and their corresponding failure to appear in non-Angl, together with the individual developments which some of the monophthongized forms undergo, would be remarkable. Yet it is clear that the consonants which caused smoothing had not necessarily been subject to palatalization and

assibilation, both because of later evidence, such as ME *werk(e)* ‘work’, and because the conditions for palatalization and assibilation, see §§7.16, 33, were not present in the relevant forms. It is probable, therefore, that the most plausible explanation will be one that supposes neither that the smoothing consonants remained fully velar, nor that the change was purely orthographic, nor that palatalization and assibilation necessarily affected the consonants. Important examples are those such as *ġesihþ* ‘sight’ < **ġesiuxihþ*, which show that /x/ caused smoothing even when followed by /i/, and it is probable that in that environment there occurred a palatal fricative allophone of /x/, namely [ç], see Jordan (1974: §§196–8) for the ME evidence.⁴ We may therefore suppose that the smoothing consonants were palatal allophones of the velar phonemes /x, k, ɣ/, that is, [ç, c, ʝ],⁵ orthographically ⟨h, c, g⟩. But the following difficulties present themselves. Firstly, the environment for the creation of fronted allophones is uncertain. It is most likely that the most favourable environment would be a preceding front vowel, but of course in smoothing environments the consonants are always preceded by diphthongs with a back second element. A solution to this would be to suppose that the second element of diphthongs had already been reduced to [ə]. However, this is chronologically suspect, see §§2.30, 43, 5.41, 46. In phonemic terms, at least, the relevant diphthongs must be analysed as containing a second element which is [+back], and that would suggest that the creation of palatal allophones was phonetically improbable. However, a prosodic explanation may be more helpful. In prosodic terms breaking can be accounted for as a sequence of front vowel + back consonant in which the latter is dominant and controls a leftwards *w*-prosody over the sequence, see §5.18, the primary realization of the prosody being the epenthesis of a nonsyllabic back vowel. It may be that by the time of smoothing the front vowel had become the dominant element in the sequence, over which it then exercised a rightwards *j*-prosody, the primary realization of which would be the palatal allophones of the velar consonants referred to above.⁶ Secondly, there is the question of whether or not consonants which have been subject to palatalization and assibilation cause smoothing. Evidence that they apparently do not come from examples where /æ:/, the *i*-umlaut of */a:/, is not raised to /e:/, as in smoothing, for example, *æht* ‘property’, *cæg* ‘key’, *ræcan* ‘reach’, but such forms are capable of a rather different explanation, see §5.99.⁷ Possible examples of smoothing before such consonants are extremely rare, but note EpGl, ErfGl 132, CorpGl 285 *berc* ‘birch’, which might or might not show palatalized *ç*, see Brunner (1965: §120A4).⁸ The evidence is thus inconclusive. On the other hand there are three factors which help to confirm that smoothing took place before velars only if those velars had been fronted. Firstly, smoothing fails before /w/, which was never subject to fronting, for example, *trēow* ‘tree’, see further §§5.44–5 for this and similar forms and also for the

simplified spellings ⟨trēu, trēw⟩. The explanation must be that smoothing does not take place before an unfronted velar. Secondly, smoothing does not take place before /lx, rx/ if fronting has been inhibited by an immediately following back vowel, hence Ps(A) *ðuerh* ‘crooked’ but *ðweoran* acc.sg.⁹ Thirdly, the raising of /æ/ > /e/ before liquids, see above and §5.98, is scarcely explicable unless those liquids were develarized, cf. the influence of velarized liquids in breaking. And it is extremely unlikely that the liquids could be non-velar unless the following consonant were palatal(ized). Therefore we may conclude that Anglian smoothing was a process of monophthongization before a palatal or palatalized consonant (even if that consonant was merely an allophone of a velar consonant).¹⁰ The change may therefore be approximately characterized as follows, where the stipulated condition refers to the subsequent raising of /æ/ > /e/ before liquids:

$$\left[\begin{array}{c} \text{V} \\ \text{-back} \\ \langle \text{-long} \rangle_a \end{array} \right] \left[\begin{array}{c} \text{V} \\ \text{-syll} \end{array} \right] > \left[\begin{array}{c} \text{V} \\ \langle \text{-low} \rangle_a \end{array} \right] \emptyset / \text{_____} \left[\begin{array}{c} \text{+cons} \\ \text{-obst} \\ \text{+cont} \end{array} \right]_b \left[\begin{array}{c} \text{C} \\ \text{-ant} \\ \text{-cor} \end{array} \right]$$

Condition: if a, then b is obligatory; elsewhere b is optional.

¹ In the earliest Kt charters, such as Ch 21, 23, 24, there are monophthongal spellings before *ht*, *hþ*, *hs*, as in the personal name-element *berht*, and similar forms are found in later charters, such as Ch 1200.5 *rehtlicast* ‘most correct’ alongside 14 *reohte* ‘right’ dat.sg. Girvan (1931: §90) suggests that Anglian smoothing penetrated the earliest Kt texts, but this could simply be due to Merc scribal influence, see further §5.99n7. The less regular examples of monophthongization in later texts are more probably due to the change known as palatal umlaut, see §5.115 and also n3 below.

² For LWS *hēb*, *nēb*, etc., see §5.119–23.

³ Prior to this the monophthongization had been referred to as ‘sogenannter Palatalumlaut’. The change in terminology had the unfortunate repercussion that the conditioning consonants were considered to be velar, and the parallels with palatal umlaut proper were lost. Nevertheless it has to be stressed that palatal umlaut was dialectally, chronologically, and phonologically a distinct sound change, see further §§5.113ff.

⁴ On apparent OE evidence from the runic inscription on the Ruthwell Cross, see §2.50 and the references therein.

⁵ The degree of fronting involved in the smoothing consonants is uncertain, and therefore [ɣ'] is used to distinguish the relevant sound from /j/.

⁶ If this is correct, then the formulaic characterization of smoothing given below is rather misleading, since it fails to demonstrate that the front element of the diphthong is the primary activator of the change.

⁷ Nbr *ēghwēlc* ‘each’, *ēghwer* ‘everywhere’, *ēghwona* ‘from everywhere’ are often cited as evidence that raising of /æ:/ only took place before true velars. It is then suggested that in these cases /j/ became velar due to the following *-hw-* and thus that /æ:/, the *i*-umlaut of earlier */a:/, was permitted to raise. If, as is argued in §5.99, /æ:/ due to *i*-umlaut is never raised, these forms must have a different explanation; furthermore, it is by no means certain that /j/ would velarize to /ɣ/ in this position. On the other hand, it is entirely reasonable to suggest that these forms are due to the

development of Gmc */ai/ under low stress, see §5.7 and cf. Merc *ōēghwelc*, etc. In the Nbr cases we should assume that */ai/ developed to a sound intermediate between /a:/ and /o:/, and this unlauded to /e:/ perhaps through a stage *[ɛ:]. Note that in these words a minority of Nbr forms show ⟨æ⟩.

⁸ Another possible example, Ps(A) 90.14 *gefriġu* ‘I free’, is to be explained differently, see §5.137 and Luick (1914–40: §247A1). See also §5.96n1.

⁹ An alternative explanation, that in these environments [h] was lost before a back vowel earlier than smoothing but before a front vowel later than smoothing, see Campbell (1959: §231), is clearly unattractive and lacks textual support, see further §5.100(1).

¹⁰ It is worth repeating that smoothing is here seen as the implementation of a *j*-prosody. Of the major handbooks, only Girvan (1931: §91) holds a similar view. Bülbring (1902: §§193–4) believes that smoothing took place before palatal and velar consonants alike. Luick (1914–40: §§238, 241) argues that ‘true’ smoothing took place only before fully velar consonants and that the shift of, for example, **gesiuixip* > *gesihp* was a different change occurring before palatals, see Luick (1914–40: §192). Campbell (1959: §222) sees the change as occurring before back consonants, except in a few cases (essentially those of Luick, 1914–40: §192), where it must have occurred before palatals (Campbell, 1959: §233). Brunner (1965: §119A1) views the change as purely orthographic, although occurring only before velar consonants.

5.94 Since the diphthong */iū/ could only arise by the time of smoothing through breaking and since breaking of */i/ before */r/ + consonant probably failed before following */i/, it is most likely that forms such as *birhtu* ‘brightness’, *birce* ‘birch’ never had a diphthong, see §5.20. Consequently the only examples of smoothing of */iū/ are due to breaking of */i/ before */x/, and in such cases */iū/ is regularly monophthongized to /i/.¹ Typical examples of the change in a variety of Angl texts are: EpGl, ErfGl 10, CorpGl 196 *friht(r)ung* ‘divination’, ErfGl 384, CorpGl 800 *siid* (= *sīð*) ‘he sees’, Ps(A) *pliht* ‘danger’, *gesihð* ‘sight’, Ru1 *gesihst* ‘thou seest’, LiGl *rihta* ‘correct’ and forms, *mixen* ‘dunghill’, DurRitGl *gerihta* ‘correct’, Ru2 *gesihp* ‘he sees’, from earlier **friuhtrung*, **siuhip*, etc.

¹ The fact that smoothing is most regular, even in the earliest texts, if the diphthong is */iū/ or */iu/, see the following paragraphs, is further evidence that the change was caused by a *j*-prosody. Exceptions to smoothing of */iū/ are sporadic and of little significance, such as MtGl(Ru1) 6.18 *gesēoþ* on the analogy of other forms, similarly LkGl(Li, Ru2) *rehtanne* infl.inf. with ⟨e⟩ from *reht*.

5.95 Whether from Gmc */iu/ or Gmc */i:/ by breaking, the diphthong */iu/ is monophthongized to /i:/ before palatal consonants¹ with great regularity in all Angl texts.² Examples of the smoothing of Gmc */iu/ are: EpGl, ErfGl 12, CorpGl 112 *flīo* ‘disease of the eye’ (< **flīuhjō*), EpGl, ErfGl 97, CorpGl 185 *getiunge* ‘order’,³ *lihtan* ‘lighten’ and related forms in Ps(A), LiGl, Ru1, and Ru2, MtGl(Ru1, Li) 23.37 *ċiken*, *ċicceno* ‘chicken’. Examples of smoothing of */iu/ due to breaking include: *bitwīh* (all texts, in variant forms), CorpGl 2007 *þīxlum* ‘axles’ dat.pl., with variants in EpGl, ErfGl,

Ru1 *līht* ‘light (in weight)’, Ps(A) *wī(ġ)bed* ‘altar’, *līhtan* ‘alleviate’ and forms, also in DurRitGl, LkGl (Li, Ru2) 11.5 *līh* ‘lend!’, and various forms of WS *wrēon* in all texts, but often with later hiatus resolution, see §§5.132ff., for example, Ps(A) *onwrih* ‘uncover!’, *wrið* ‘he covers’.

¹ But examples with an intervening liquid are lacking.

² There are a few examples where ⟨ē⟩ rather than ⟨ī⟩ is found, but these are of no significance. LiGl, DurRitGl *bituēn* (5×) is probably an error for more frequent *bituīen* < **bituūxen* by smoothing, loss of /x/ and hiatus resolution; MtGl(Li) 11.30 *lēht* ‘light (in weight)’ is probably due to scribal confusion with *lēht* ‘illumination’, and only Beo 1032 *fēla* gen.pl. is unexplained. For an alternative view see Luick (1914–40: §236A2).

³ This and the other forms quoted here without following *h* normally show lenition and loss of intervocalic */x/, see §§7.45–51.

5.96 With only a few exceptions in the earliest Merc texts, the diphthong */ēō/ is regularly monophthongized to /e/ in all Angl texts before palatal consonants with or without an intervening liquid. Typical examples of the change are: EpGl, ErfGl 132, CorpGl 285 *berc* ‘birch’, see §5.93, EpGl, ErfGl, CorpGl *el(c)h* ‘elk’, EpGl, ErfGl 699, CorpGl 1450 *werci* dat.sg.,¹ Ps(A) *feh* ‘money’, *gefēht* ‘battle’, *were* ‘work’, Ru1 *feh*, *cneht* ‘servant’,² *werc*; LiGl, DurRitGl, Ru2 have similar forms, and examples in the eNbr texts are: CædH (M,L) 3 *uerc*, LRid 4 *ðerh* ‘through’, RuneAuzon 2 *-berig* ‘mountain’ (with later epenthesis, see §6.35), 6 *fegtaþ* ‘they fight’, and smoothing is also regularly evidenced in the proper names of Bede(M) and LVD. The early Merc glossaries have a very few examples of unsmoothed diphthongs, all of which have an intervening liquid, although that may be due to chance: EpGl 556 *-ġeweorc* ‘work’, EpGl, ErfGl 981 *sceol(h)ēgi* ‘squinting’,³ ErfGl 320 [e]oritmon ‘camel driver’, CorpGl 1672, 1771 *-biorg*, *-beorg* ‘protection’. Ru1 has a larger number of unsmoothed forms, examples being: *weorc* (2×), *feoh* (3×), *beseoh* ‘look!’, but these may show no more than the WS influence which is obviously present in this text.

¹ This form could be an instance of smoothing before palatalized and assibilated *ċ*, but alternatively the monophthong could have been extended from the nom.sg. See also §§6.50–4 on the status of the inflexional *-i*.

² Alongside *cnæht*, also *gefæht* ‘battle’ and related forms, cf. similar sporadic examples in Nbr, such as LiGl, Ru2 *sæk* ‘see!’. There is no satisfactory explanation of these forms. Ru1 *wærc* (2×) could be due to confusion with *wærc* ‘pain’.

³ This form can scarcely be due to earlier loss of *h*, as implied by Campbell (1959: §227), see §§5.100(2), 102.

5.97 With a few exceptions in the earliest Merc texts, the diphthong */eo/ from whatever source is regularly monophthongized to /e/ before palatal consonants (there being no instances with intervening liquids).¹ Examples of the smoothing of Gmc */eu/ are: CorpGl 1194 † *lēhtfaet* ‘lantern’, 1354 *flēge* ‘fly’, 556 *thēgh* ‘thigh’, Ps(A) *lēht* ‘illumination’, *flēgan* ‘fly’ acc.sg.,

Ru1 *lēht*, *mōnsēk* ‘lunatic’, with similar forms in the INbr texts. Examples are lacking in the eNbr texts, but see below. Examples of the smoothing of */eo/ due to breaking are confined to *nēh* < **nēoh*, which is lacking in the early Merc glossaries, but found in all the other major Angl texts and also in the eNbr RuneAuzon 10 *unnēg* ‘distant’.² There are no smoothed forms in either EpGl or ErfGl, the relevant examples being 817 *-flīogae*, *flīogo* ‘fly’, ErfGl 295 *thēoh* ‘thigh’, to which may be added CorpGl 1832 *þēoh*-. This is more probably due to the early date of the texts than to influence from a southern, perhaps Kt, dialect. Ru1 has approximately as many unsmoothed as smoothed forms, hence *-sēoke*, *leoht*, cf. above, *flēoh* ‘flee!’, *atēoh* ‘draw away!’, *wēox* ‘it grew’. The imp. forms above are probably analogical, and other forms may be due to no more than scribal confusion.

¹ In Ps(A) and Ru1 there are a number of examples with apparent smoothing to /i:/, all of which are strong class II verbs, such as Ps(A), Ru1 *līgende* ‘lying’, Ps(A) *flīgu* ‘I fly’, Ru1 *smikende* ‘smoking’. They are probably due to analogy with the 2,3sg.pr.ind., see Luick (1964–40: §273A3).

² Ru1 has here a number of examples with *-ē-*, for example, *nēhstu* ‘next’ fem. Compare here §5.96n1, although the present forms may more probably be ascribed to WS influence.

5.98 With a few exceptions in the earliest Merc texts, the diphthong */æ̃a/ is regularly monophthongized to /æ/ before palatal consonants with or without an intervening liquid. But if /r/ immediately follows /æ/ there is then raising to /e/ and this raising is regular in all but the earliest Merc texts.¹ Examples of the smoothing of */æ̃a/ directly before a palatal consonant are: EpGl 673, 674 *naechthraebn* ‘night-raven’, ErfGl 26 *næctægela* ‘nightingale’, CorpGl 1155 *laex* ‘salmon’, 625 *saex* ‘knife’, 1955 *waexit* ‘it grows’, EpGl, ErfGl 13, CorpGl 259 *aex* ‘axle’, EpGl, ErfGl 836 *aec(h)tath*, CorpGl 1696 *aeh̃tað* ‘he considers’, EpGl, ErfGl 840 *aebrian*, *ægrihan*, CorpGl 1696 *aegnan* ‘chaff’ pl. (see further Pheifer, 1974: §50.3), Ru1 *sæh* ‘he saw’, *næht* ‘night’, *mæht* ‘might’, *waexaþ* ‘he grows’, Ps(A) *gēsæh* ‘he saw’, *maeh̃te* ‘he might’, *-saex* ‘knife’, *wæx* ‘wax’, CædH(M) *maecti* ‘powers’ acc.pl., and similar forms generally appear in the INbr texts, see, however, n2 below. In this environment the only important unsmoothed form is EpGl 555 *leax*, cf. *laex* above, and Ru1 *gēsæh* (6×, alongside more frequent *gēsæ̃h*) is a further instance of WS influence on the scribe of this text.² When /r/ intervenes, the early Merc glossaries usually have /æ/ rather than /e/, the relevant examples being: EpGl, ErfGl 811, CorpGl 1616 *faerh* ‘pig’, CorpGl 1255, 1772 *haerg(a)* ‘temple’, EpGl, ErfGl 588, CorpGl 1249 *mærh* ‘marrow’, ErfGl 547 *fri[s]t-*, CorpGl 1108 *fīrst-maerc* ‘interval’, CorpGl 1121 *gemaercode* ‘it marked’, CorpGl 1827 *spærca* ‘spark’, ErfGl 410, CorpGl 930 *uaergrōd*, *waergrood* ‘gallows’, against CorpGl *bercae* ‘barking’ (see Hoad, 1978: 55), ErfGl 227, CorpGl 362 *mer[c]isae[r]n* ‘branding-iron’,

CorpGl 1308 *merg* ‘marrow’. A further form with /æ/ is LRid 13 *aerigfaerae* ‘arrow flight’, perhaps because of early epenthesis of /i/, although note that the epenthesis does not prevent the monophthongization. Otherwise /e/ is regular in Angl, for example, Ps(A) *herg* ‘temple’, Ru1 *gemarkade* ‘he marked’, LiGl *berg* ‘pig’, Ru2 *mercung* ‘marking’, and many other forms. Unsmoothed forms in the earliest texts are: EpGl 652, CorpGl 1284 *bearug* ‘pig’,³ CorpGl 153 *meahh* ‘horse’, EpGl 227, 547 (-)*mearc*(-) ‘mark’, EpGl 409 *uueargrōd*.

¹ Except for EpGl *fealga* ‘harrows’, there are no examples of this diphthong before /l/ since Gmc *a did not front in such circumstances in Angl, see §5.15. *Fealga* must be a dialect borrowing, perhaps from Kt.

² In addition to the above forms, all Angl texts have a variety of forms with ⟨e⟩, which are to be otherwise explained. (1) Ru2 has eight forms of *wexan* ‘grow’, also *wexbredes* ‘tablets’, which are most probably due to raising before /s/ which has been further fronted by following /s/. This change appears to have been dialectally restricted, but it also occurs quite frequently in the proper names of other possibly SNbr texts such as Bede, LVD, see Bülbring (1899a: 6), Campbell (1959: §224) for examples. Outside SNbr such examples are no more than sporadic: PsGl(A) 96.5 *wex* ‘wax’ alongside *wæx*, ErfGl 555 *lex* ‘salmon’ alongside *laex*, and they may be no more than spelling errors. For apparently relevant forms in Ru1, see (4) below. (2) In all texts there are a number of words in which unumlauted and umlauted forms co-exist. The unumlauted forms have generally been quoted above, umlauted forms should show ⟨e⟩, as in *neht* ‘night’, *meht* ‘power’, *æhher* ‘ear of corn’. (3) In all texts past forms of weak verbs *aweccan* ‘wake’, *biðeccan* ‘cover’, *reccan* ‘direct’, which should have ⟨æ⟩, for example, *ræhte* ‘he directed’, more frequently take the vowel of the present, hence *rehte*, etc. (4) Ru1 has a comparatively high number of ⟨e⟩ spellings in: *ehtu* ‘I consider’, *exlan* ‘shoulders’, *gēpehtunge* ‘consultation’, acc.sg., *wexan* ‘grow’, *wexep* ‘it grows’ (without *i*-umlaut, see §5.85(6)). There is no certain explanation for these forms, although scribal error is most probable, see also (1) above. (5) ErfGl 928 *brectme* ‘noise’ dat.sg. may be due to the frequent avoidance of ⟨æ⟩ by the continental scribe.

³ This form is not due to back umlaut, as suggested by Campbell (1959: §360n2), for /u/ is due to later epenthesis. On the etymology of the word see Ball and Stiles (1983: §3.2.2 and App.) Compare also LiGl *berg*, above.

5.99 The diphthong */æa/ < Gmc */au/ is, with a number of exceptions, particularly in early texts, monophthongized before palatal consonants¹ to a sound represented by ⟨ǣ⟩ or ⟨ē̄⟩ according to text. ⟨ǣ⟩ spellings are restricted to the early Merc glossaries and related texts,² where they are in variation with ⟨ē̄⟩, and all other texts, even the earliest Nbr texts, use ⟨ē̄⟩ for the smoothed sound. It seems most probable that this reflects a dialectal at least as much as a chronological distinction, cf. Bülbring (1902: §193), Luick (1914–40: §238), Girvan (1931: §93), Campbell (1959: §225), for the complete absence of ⟨ǣ⟩ in eNbr and WMerc would be remarkable if the distinction were purely chronological. The dialectal distinction can be phonologically explained as follows. Since /ǣ:/ < Gmc */ai/ by *i*-umlaut does not regularly develop to /e:/ even when followed by a palatal consonant,

see §5.93 and n7, it can be assumed the sound produced by smoothing of */æɑ/ was slightly higher than /æ:/ by *i*-umlaut but not as high as /e:/, that is, approximately [ɛ:]. In most dialects this [ɛ:] was assimilated to /e:/, but in the dialect of the early glossaries there was vacillation between /e:/ and /æ:/. The distribution of ⟨æ̅⟩ and ⟨ē̅⟩ in the early glossaries is as follows: EpGl – 5× ⟨æ̅⟩, 3× ⟨ē̅⟩; ErfGl – 7× ⟨æ̅⟩, 8× ⟨ē̅⟩; CorpGl – 17× ⟨æ̅⟩, 9× ⟨ē̅⟩. Examples of ⟨æ̅⟩ include: (-)lāēc ‘leek’, āēc ‘also’, -bāēg ‘ring’ (not EpGl), and examples of ⟨ē̅⟩ include: ēgan ‘eyes’ (not ErfGl), lēlodrae, lēlothrae ‘meadow-bur’,³ ErfGl gēcaes, CorpGl iēces ‘cuckoo’. In these glossaries there are also a fair number of unsmoothed forms: EpGl 9×, ErfGl 4×, CorpGl 2×, examples including: lēactrogas ‘clusters’ (a loanword), EpGl, ErfGl andlēac ‘opened’, EpGl flēah ‘flea’.⁴ In the other major Angl texts, however, smoothing to /e:/ is practically universal, with the exception of forms cited in n2.⁵ Hence we find common Angl ēc ‘also’, hēh ‘high’, bēg ‘ring’, and many other forms.^{6,7}

¹ There are, of course, no examples with an intervening liquid, see §§5.25, 23.

² ⟨æ̅⟩ spellings which occur in other texts are to be otherwise explained. They occur most commonly as the result of shortening in weak-stressed positions, hence frequent æc ‘also’, ðæh ‘although’, which occur generally in Angl, although, by chance, Ps(A) has no examples of the former. For LiGl flæh ‘he flew’ and a few other preterites of strong class II verbs, see §5.101(2).

³ Presumably these examples have ⟨ē̅⟩ due to the influence of the simplex lēh (WS lēah) ‘meadow’, see §5.100n2.

⁴ Note the contrast between the steady decline of unsmoothed forms and the increase of ⟨æ̅⟩ spellings, which confirms the non-chronological explanation of the latter. Note also that the late ninth-century Merc text Med 5.10, later than CorpGl, see Schaumann and Cameron (1977: 310–12), has ⟨æ̅⟩ only: 22, 28 āēc ‘also’, 11 dāēg ‘it avails’.

⁵ There are a few scattered unsmoothed spellings: þēah ‘although’ Ru1 2×, DurRitGl 1×; ēage ‘eye’ Ru1 3×; ēac ‘also’ LiGl 12× (including spellings such as ⟨æ̅c⟩).

⁶ Note especially the following eNbr forms: LRid 4 hēh- ‘high’, 11 ðēh ‘although’, and possibly RuneBewcastle 2 sġhbēcn ‘victory monument’, see Page (1960, 1973: 148).

⁷ In early Kt charters æc ‘also’ is frequent, and note further Ch 41.19 Hægȳðe place-name, 1510.24 Bægmund personal name. Despite Campbell (1959: §314) these seem to be clear examples of Merc scribal influence.

5.100 There are two principal exceptions to the above series of changes, which are discussed immediately below.

- (1) In the sequence: diphthong + liquid + /x/, smoothing takes place only if /x/ is not immediately followed by a back vowel. Thus we find contrasts such as ErfGl 364a, CorpGl 627b ēola ‘elk’ against elch, see §5.96, PsGl(A) 68.15 fēle ‘I may enter’ against PsGl(A) 72.28 ætġēalan ‘adhere’, Ps(A) ðwēoran, ðwēoru ‘perverse’ infl. (4×) against ðwerh (2×). In such cases it is most probable that the following back vowel prevented /x/ from being fronted and that therefore the phonological

conditions for smoothing were not met. The chronological explanation of, for example, Luick (1914–40: §239) and, more firmly, Campbell (1959: §231), namely that /x/ was first weakened and lost before a back vowel, seems both ad hoc and implausible.

- (2) Usually smoothing took place before /x/ was lost between sonorants, see §5.102 for further details, but if /x/ stood between a diphthong and a liquid or nasal,¹ then /x/ was lost too early for smoothing to take place and the diphthong remained.² Typical examples include: various compounds of *hēh* (WS *hēah*), such as *hēalecas* ‘skilled physicians’, *hēanis* ‘highness’, various compounds of *nēh* (WS *nēah*), such as *nēolācan* ‘approach’, *nēowest* ‘neighbourhood’, also *ēorod* ‘troop’ (< **eohrod*). However, smoothing of */iu, iū/ > /i:/, /i/ always takes place even in these environments, for example, *wi(ġ)bed* ‘altar’, see §5.95, CorpGl *fīl* < **fīxl*, which further confirms the view that smoothing was earliest and most extensive if the first element was [+high].

¹ Except in newly formed OE compounds, /x/ could not normally occur in such positions before a true obstruent. But in such compounds the same process is seen, hence *nēosian* ‘visit’, and many proper nouns in early texts, such as LVD † *Hēaburg*, † *Plēouald*.

² There are a number of examples where smoothing is indicated, no doubt due to the influence of the simplex, such as CorpGl 1960 *hāehnisse*, PsGl(A) 11.9, 18.7 *hēhmisse*, 140.4 *genēhlācu* ‘I approach’, see too §5.99n3. But LRid 4 *hēhcræft* ‘skill’, EpGl, ErfGl 881, CorpGl 1761 *puerhfyri* ‘difficulties’ may simply have preserved /x/.

5.101 There are no major morphophonological consequences of smoothing, but the following minor alternations should be noted.

- (1) Since /x/ is protected from fronting when it is preceded by a liquid and followed by a back vowel, see §5.100(1), smoothed and unsmoothed forms may alternate in a few paradigms, according to whether or not /x/ has been fronted. Hence we find alternations such as *ðwerh*, *ðwēoran*.
- (2) Wherever appropriate strong class II verbs should show smoothing of *-ēo-* in the present, *-ēa-* in the past sg., hence *flēgan* ‘fly’, *flēh* ‘he flew’. In Merc, however, *-ī-* is sometimes found in the present, see §5.97n1, and LiGl past tense forms such as *flāēh* are frequent. It is probable that in the latter case this is due to a wish to avoid homonymic clash between the smoothings of *-ēo-* and *-ēa-*, see §5.99, rather than to any analogical process.¹ In Nbr where *-ē-* occurs in the past sg. this may be extended to other past forms, such as *ġebrēcon* ‘they enjoyed’ for *ġebrucon*.
- (3) In derivational morphology there are often alternations between smoothed and unsmoothed forms of the type *nēh* ‘near’ ~ *nēowest* ‘neighbourhood’, see §5.100(2).

¹ It is sometimes suggested, for example, in Campbell (1959: §225), Brunner (1965: §119A5), that *flāēh*, etc. have /æ:ɪ/ on the analogy of the preterite of strong classes IV and V, such as *sæh* 'he saw'. But the analogy seems arbitrary and dubious, as indicated by Campbell (1959: §740).

5.102 The relative chronology of smoothing has been the subject of considerable debate, but certain points are clear. Firstly, smoothing must have been a later change than second fronting, for otherwise in WMerc /æ/ by smoothing of */ǣa/ would always have been raised to /e/, and that change only occurs if /t/ immediately follows, hence *gesæh*, etc. Thus smoothing is also likely to be later than *i*-umlaut, which is not independently provable.¹ Secondly, it is clear from the examples above that smoothing was earlier than loss of *h* unless *h* was immediately followed by a consonant, cf. *sīþ* 'he sees' < **sixiþ* < **siuxiþ*, *hēan* 'high' wk.adj. < **hēaxan* < **hēaxan* against *hēanis* 'highness' and the other forms cited in §5.100(2). Thirdly, a number of unsmoothed forms have been noted above, see §§5.96–9, for which the only reasonable explanation is that in the very earliest texts smoothing was not always indicated because the change was relatively recent. This is not the case with changes previously discussed. We may, therefore, conclude that smoothing was a later change than the others discussed earlier in this chapter. Furthermore, since the number of unsmoothed forms is greater for diphthongs with /æ(:)/ as their first element, it may be that the sound change first affected high vowels, that is, that diphthongs with a nonlow first element were more sensitive to smoothing. More difficult, however, is the relative chronology of smoothing and back umlaut, for the latter see §§5.103ff. There are two plausible methods for explaining forms such as Angl *wegas* 'ways'. Firstly, if smoothing preceded back umlaut, it must be assumed that back umlaut failed in such environments, presumably because the intervening consonant, although phonemically velar, was phonetically palatal, see further §5.103. Secondly, if back umlaut were the earlier change, we may suppose the following development: **wegas* > *weogas* (back umlaut) > *wegas* (smoothing). Amongst the principal writers on the topic, Girvan (1931: §107) holds the first view, Bülbring (1902: §§202, 204, 208) and Campbell (1959: §247) the second, and Luick (1914–40: §235A3), whilst believing that back umlaut did not take place in cases such as *wegas*, suggests that the relative chronology of the two changes is undecidable. However, as demonstrated by Ball and Stiles (1983), see also Girvan (1931: §107), there are no texts which show back umlaut without also showing smoothing,² but there are several early texts, such as EpGl, RuneAuzon, CædH, which show smoothing but not back umlaut.³ Hence there is strong textual evidence for accepting that smoothing was the earlier change. For full details of the chronology of back umlaut see §§5.103, 112.

¹ Alternations such as *næht* 'night' with smoothing of */ǣa/ and *neht* with *i*-umlaut of the same could arise whichever of the changes was the earlier.

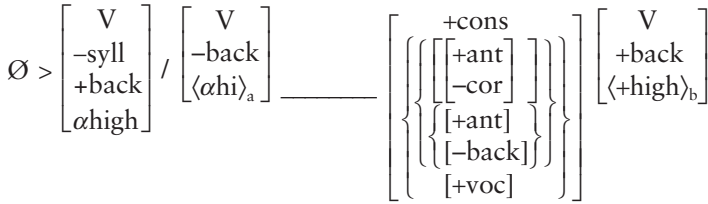
² RuthCr 45 has *heafunæs* 'heaven' gen.sg., a clear example of back umlaut, but by chance there are no examples of smoothing in the text.

³ LRid 10 *ġeolu* 'yellow' shows analogical transfer of the diphthong from inflected forms where breaking took place before /w/, see §5.22 and n3, Ball and Stiles (1983: §4.2). For EpGl 652 *bearug* 'pig' see §5.98n3, and forms in the early Merc glossaries such as EpGl, ErfGl 902 *sċeadu* 'shadow' are best explained as due to palatal diphthongization of */a/, see §5.69 and n3.

IX Back umlaut

5.103 At or about the time of the earliest texts the short front vowels /i/, /e/, /æ/ tended to diphthongize to the sounds represented by ⟨io, eo, ea⟩, that is, /iö/, /eö/, /ǣa/, when there was a back vowel in the following unstressed syllable.¹ This back vowel could either be /u/, in which case the diphthongization is known as *u*-umlaut, or /a/, in which case it is known as *a*-umlaut.² Collectively the changes are known as back umlaut. Both the nature of the diphthongization and the fact that that diphthongization is caused by a following [+back] element demonstrate that the change is phonologically very similar to the earlier change of breaking, see §5.16.³ Whilst *u*-umlaut is general in all dialects, in WS *a*-umlaut is largely restricted to the high vowel /i/, a restriction not found in the other dialects. Further, the nature of the intervening consonant(s) is crucial to the operation of the sound change, and this is a matter of considerable dialectal variation. With only a few scattered exceptions, see below, §5.107 for examples, there must be only one intervening consonant, and in WS the umlaut is regular only if that consonant is a labial, that is, /p/, /f/, /m/;⁴ and labiovelar /w/, or one of the liquids /l/, /r/. In Kt, on the other hand, the umlaut appears to proceed regularly regardless of intervening consonant. For Angl there is no general agreement as to the precise conditions under which the change took place, see further below, but the overwhelming majority of Angl forms show no diphthongs in relevant environments if the intervening consonant is an original velar. These dialectal variations may be exemplified by the following instances of the *u*-umlaut of */i/ (ignoring various later developments irrelevant to the general issues): **sifun* > *siofon* 'seven'; **ġewritu* > WS *ġewritu*, nWS *ġewriotu* 'writings'; **regul* > WS, Angl *regol*, Kt *reogol* 'rule'. For the Angl cases with an intervening velar, the following alternative explanations have been offered: (1) back umlaut did take place before velars, but the diphthongs were subsequently monophthongized by Anglian smoothing, see §§5.93ff., that is, the development was of the type **regul* > **reogol* > *regol*, see Bülbring (1902: §§233–5), Campbell (1959: §247), Quirk and Wrenn (1957: §214); (2) regardless of the relative chronology

of smoothing and back umlaut, the latter change did not take place before an intervening velar in Angl, that is, **regul* > *regol* directly, see Girvan (1931: §107), Luick (1914–40: §235A3), Ball and Stiles (1983: §6.1), although all these writers admit to certain exceptions. Since, however, smoothing seems certain to have been an earlier sound change than back umlaut, see §§5.102, 112 and references, the first of these explanations must be untenable. Nevertheless, the second explanation faces two difficulties. Firstly, there are occasional forms such as CorpGl 114 *heagoðorn* ‘hawthorn’, cf. 1897 *haeguðorn*, see further §5.106(1), which unambiguously show back umlaut.⁵ Secondly, it is phonetically improbable that a velar consonant should inhibit back umlaut, consider here the similarities between this change and breaking, referred to above, and also the discussion of smoothing in §5.93. However, these difficulties may not be insuperable. As stated in §5.93, Anglian smoothing is most probably due to the exercise of a *j*-prosody stemming from a front vowel (the first element of a diphthong), which in most environments fronts a following velar consonant, thus causing a monophthongization of the diphthong. It would, therefore, be logical to assume that a front vowel which directly preceded a velar consonant would be even more likely to exercise such a fronting effect. Such velar fronting would have to occur at least at the time of smoothing and hence earlier than back umlaut.⁶ Thus the development of **regul* would be to **regʷul* by velar fronting and this form would not undergo back umlaut because of the palatal nature of the intervening consonant. It is entirely consistent with the general nature of back umlaut, with the failure of breaking before a palatalized consonant, see §5.16n2, and with the process of smoothing that back umlaut should be so inhibited.⁷ The various Merc examples which unexpectedly show back umlaut in these contexts can also be systematically explained, see §§5.106(1), 112, below. A further complication is that when the front vowel is immediately preceded by /w/, then in a large number of cases the vowel is not diphthongized but is instead retracted to the corresponding back vowel, that is, /i, e, æ/ > /u, o, a/, cf. the similar change with respect to breaking discussed in §§5.28–31. It is clear that the labiovelar nature of /w/ has an intensifying effect on back umlaut parallel to its effect on breaking. This change, which may be conveniently described as combinative back umlaut to distinguish it from ‘simple’ back umlaut, is most notable in WS, although examples are to be found in all dialects. Combinative back umlaut is discussed separately in §§5.108–10.⁸ We are now, however, in a position more generally to characterize back umlaut as the epenthesis of a back nonsyllabic vowel after a short front vowel when there is a back vowel in the following syllable, provided that only a single consonant intervenes. In all dialects that consonant must not be a palatal and in WS only labials and liquids permit the change.⁹ The change can therefore be characterized approximately as:



Condition: if a = [-high], then b (WS only).

¹ Since earlier */æ/ had retracted to /a/ before a back vowel, see §§5.35–6, back umlaut of /æ/ could only occur regularly in those dialects where second fronting had occurred and produced new examples of /æ/ before a back vowel, see §§5.87–90. In no dialect does the change ever occur with long vowels.

² /u/ usually becomes /o/ sometime during the OE period and /a/ is from earlier */o/, see for the latter §6.28. The chronology of *u*-lowering relative to back umlaut is uncertain, see §6.58. Although *o*-lowering is undoubtedly earlier than back umlaut, *a*-umlaut is often referred to as *o/a*-umlaut.

³ See further Brosnahan (1953: §§124–33). The similarities are so close that they led Lass and Anderson (1975: 102–7) tentatively to suggest that the two rules might be collapsed together, see also Jones (1989: 78–81). However plausible this might be from the synchronic point of view (and the phonetic problems are difficult), the two changes are quite separate chronologically, see further §5.112.

⁴ There are no examples of single medial /b/, see §2.53. It is sometimes suggested that if the intervening consonant is /m/, then the change does not always occur regularly, see §5.104n2.

⁵ Campbell (1959: §247) speaks incorrectly of ‘the complete absence in Anglian except in analogical forms of back umlaut before back consonants’. Compare here Campbell (1959: §207).

⁶ Luick (1914–40: §709A1) appears to suggest that this change is probable and not necessarily a ME development. For the position in ME see Jordan (1974: §§88, 190).

⁷ It follows from the above that velar fronting had not occurred in Kt at this stage. The position in WS is less clear, because of the much greater restrictions on back umlaut in that dialect.

⁸ In the sections on simple back umlaut which follow I have excluded from the discussion all cases in WS in which /w/ immediately precedes. However, similar examples from nWS which show diphthongization rather than retraction are included for purposes of illustration wherever necessary. Such examples are briefly referred to in the sections on combinative back umlaut, together with the relevant examples from WS.

⁹ Some scholars, notably Davidsen-Nielsen and Ørum (1978), have argued that the most general characteristic of back umlaut is that the intervening consonant is acoustically [+grave]. Attractive as this proposal is theoretically, it is noteworthy that there is no dialect in which all and only all the consonants permitting the change are [+grave].

(a) Simple back umlaut

5.104 Depending upon the quality of the intervening consonant, see §5.103, earlier */i/ is regularly both *u*-umlauted and *a*-umlauted in all

dialects to /iö/, initially represented by ⟨io⟩.¹ Details and examples of the development in each dialect are given immediately below.

- (1) In WS although both *u*-umlaut and *a*-umlaut of **/i/* are regular when the intervening consonant is a labial or a liquid, the umlaut is frequently levelled out from other parts of the paradigm, see further §5.111. Examples of *u*-umlaut which can generally be found in both EWS and LWS include:² *seolfor*, *sylfor* ‘silver’;³ *seofon*, *syfon* ‘seven’, *eorðbeofung* ‘earthquake’;⁴ examples of *a*-umlaut include: *teolað* ‘he strives for’, *leofað* ‘he lives’, *bīleofa* ‘food’, *cleopað* ‘he calls’.⁵ Alongside such *a*-umlauted forms, unumlauted forms, such as *clīpað*, *tilað*, commonly exist,⁶ and there are many examples, such as *clifu* ‘cliffs’, *drifon* ‘they drove’, where unumlauted forms are not found, see further §5.111. On the other hand, in both EWS and LWS there are a number of cases where back umlaut is found even where the intervening consonant is not a labial or a liquid. Cases showing *u*-umlaut include: *neopor* ‘down’, *seodo* ‘custom’, and *-teogopa* ‘-tieth’ (ordinal); cases showing *a*-umlaut include: *niobemest* ‘lowest’ (< **niþa*-), *hionan* ‘hence’.^{7,8}
- (2) In Merc the earliest glossaries, EpGl and ErfGl, show virtually no signs of back umlaut, the only possible example being the doubtful ErfGl 521 *unliuduuāc* ‘intractable’, cf. EpGl *unlidouuāc*, CorpGl 1079 *unliopuwāc*.⁹ Examples of unumlauted forms include: EpGl, ErfGl *bitulum* ‘beetle’, *ġinath* ‘he yawns’, *hnitu* ‘nit’, EpGl *sifun-* ‘seven’, *ymbdritung* ‘deliberation’. On the other hand in CorpGl unumlauted forms outnumber unumlauted forms by about 2: 1 (Kuhn, 1939: 11), examples including *ġeonath*, *ymbðriodung*, *nioðanweard* ‘downwards’, *glioda* ‘kite’, *tioludun* ‘they strove after’. In Ps(A) back umlaut is extremely regular, examples of *u*-umlaut being: *sċeopu* ‘ships’, *seofen* ‘seven’, *liomu* ‘limbs’, *teolung* ‘zeal’, *seolfor* ‘silver’, *ġewreotum* ‘writings’, and various past plurals of strong verbs class I, such as *abiodun* ‘they awaited’, *fleotun* ‘they disputed’, *areosun* ‘they rose up’.¹⁰ Examples of *a*-umlaut are: *reopað* ‘they reap’, *leofað* ‘he lives’, *nioman* ‘take’, *heara* ‘their’ (with ⟨ea⟩ for ⟨eo⟩, see §5.45), *nioðerra* ‘lower’. The forms in Ru1 are similar, for example, *ġewriotu*, *heora*, but the diphthong is frequently analogically levelled, for example, *ġewritu*, *arisan*.¹¹
- (3) The position in Nbr is similar to that in Merc. Hence the very earliest texts show no signs of back umlaut, as in RuneAuzon 11 *sitaþ* ‘they sit’, and the earliest examples are LVD † *Friðu-*, alongside equally frequent † *Friðu-*. In the later Nbr texts the forms are similar to those of Merc, for example, *arioson*, *hiora*, but there are a few cases where the umlaut is levelled in the past plurals of strong class I verbs, notably in *fordrifon* ‘they drove out’, *ġeþrinon* ‘they touched’.¹²

- (4) Kt forms in the early charters which show back umlaut are: Ch 1482 *bewiotige* ‘look after’ pr.subj., *geornliocar* ‘more earnestly’, *niomanne* ‘take’ infl.inf., Ch 1510 *gewriota* ‘writings’, and the Surrey Ch 1508 *gewriotu*.¹³ In the later OccGl 49 the only certain example is *seoððan* ‘after’ with umlaut despite an intervening geminate, see §5.107.¹⁴ Otherwise all examples are without umlaut: *gewita* ‘witness’, *ficol* ‘fickle’, *ofsticoð* ‘he stabs’, *witodlice* ‘indeed’, *cwidas* ‘sayings’. These forms are very probably due to WS influence.

¹ By a later development, see §§5.155–61, *io* > *eo* in WS, Merc, and, to some extent, in Kt also.

² The preterites of relevant weak class 2 verbs, such as *cleopode* ‘he called’, also properly belong here in WS, but the forms could at least in theory be influenced by the *a*-umlauted forms in the present tense. Also to be noted is the form *mioloc* ‘milk’, which might be regarded as the *u*-umlaut of **iil*, but more probably shows inverted *io* for *eo*, cf. §3.29. It is unclear whether *liomu* ‘limbs’ shows back umlaut beyond its usual limits in WS, cf. *niman* where there is never any umlaut. However it is most probable that *niman* simply shows usual levelling, see §5.111(4), and hence that back umlaut does occur with intervening /m/ in WS, see §5.103 and n4.

³ For discussion of this word see Campbell (1959: §213n1).

⁴ Only found in Or (7×). In LWS the form is *eorpbifung*, without umlaut.

⁵ An additional example is *tiola*, *teola* ‘well’ < **tila*, which has the vowel of *til*, alongside *tela*.

⁶ But the only examples in Ælfric and Wulfstan of *bileofa* without umlaut are ÆLS 323, ÆLet 2.51 *biglyfan*. Hom(U)46 has *bilyfan* (2×) and similar forms can be found in other late texts.

⁷ These forms are not solely or necessarily Merc, for *-teogopa* is a non-Angl form, and in any case they can occur in LWS texts which rarely show Merc influence. Similarly it is unlikely that they are Kt. They must either derive from some WS sub-dialect, see Luick (1914–40: §224A1), or show occasional extension of back umlaut to instances with an intervening dental, even in WS. *Hweogol* ‘wheel’, occurring sporadically in late and mixed texts, may be a Kt form.

⁸ In EWS, especially CP(H), there are a number of cases where ⟨ie⟩ appears rather than ⟨io⟩ or levelled ⟨i⟩, such as *tielian* ‘strive for’ and forms, *cliepiað* ‘they call’, *gewrietum* ‘writings’, *behienan* ‘this side of’. But the appearance of such forms before dental consonants and, in most cases, their relative infrequency, suggests that they are in fact inverted spellings for ⟨i⟩, see §5.163n1, and not a type of back umlaut. For another view see Campbell (1959: §300b).

⁹ In addition there is combinative back umlaut in EpGl 430 *uudu-* ‘wood’, see further §5.109.

¹⁰ Ps(A) also shows examples where the diphthong has been extended to past plurals where an original velar immediately follows: *bisweocun* ‘they deceived’, *asteogun* (2×) ‘they descended’.

¹¹ Nevertheless Ru1 has *wreogan* (2×), *wriogan* ‘covered’, with *io* before an original velar, cf. n10.

¹² But *-flioton* (2×) ‘they disputed’ does not show such levelling in Nbr.

¹³ It is possible that to these should be added Ch 331 *stiogole* ‘stile’, indicated as ‘Saxon-Kentish’ by Sweet (1885: 438). But the form could be from a sub-dialect of WS, see n7. *Bewiotige* has a diphthong extended from ind. forms with a following back vowel.

¹⁴ Much less certain is OccGl 49.6 *clepað* ‘he calls’, where the form could be an error for *cleopað*, so Campbell (1959: §216) after Williams (1905: 44). It is, however, just possible that it is a Kt form of LWS *clypað*.

5.105 Depending upon the quality of the intervening consonant, see §5.103, earlier */e/ is regularly *u*-umlauted in all dialects, but especially nWS, and *a*-umlauted in nWS dialects to /ẽo/, usually represented by ⟨eo⟩. Details and examples of the development in each dialect are given below.

- (1) In WS the back umlaut of */e/ > /ẽo/ is relatively infrequent even with an intervening labial or liquid, for *a*-umlaut is almost entirely absent, for example, *fela* ‘many’, *nefa* ‘nephew’, *beran* ‘bear’,¹ and although *u*-umlaut is phonologically regular, it is subject to considerable analogical levelling. Examples of the *u*-umlaut of */e/ include: *heofon* ‘heaven’, *eofor* ‘bear’, *beofor* ‘beaver’, *heorot* ‘hart’,² and, since these words may exist with a front unstressed vowel, such as *hefen*, *befer*, see §§6.64 and n1, undiphthongized forms also occur, thus *hefon*, *befor*, *herot*. On the other hand, inflected forms such as *speru* ‘spears’, *nefum* ‘nephews’ dat.pl. never occur with *u*-umlaut, see further §5.111(1). There are a number of cases where /e/ as the product of *i*-umlaut is then subject to back umlaut, either because of suffix variation, cf. *heofon*, etc. above, or because of morphological transfer of verbs from weak class 1 to weak class 2, especially in LWS. Examples of the former are: *eosol* ‘ass’ alongside *esol* < Lat **asilus*, *meowle* ‘maiden’ < **mawilo*, *eowe* ‘ewe’ alongside *ewe* < **awi*, see §5.14n1. Examples of the latter are:³ *streowode* ‘he strewed’, ÆABusWarn *freomigēn*, also BedeHead 3.14.20 *freomigēnde* ‘perform’, beside much more frequent *fremian* and forms.⁴
- (2) In the earliest Merc glosses the back umlaut of /e/ is extremely rare, the only certain example being ErfGl 1039 *trīfoedur* ‘three-cornered’, with *oe* for *eo*, cf. CorpGl 2052 *ðrīfeodor*.⁵ In CorpGl the position is similar to that for the back umlaut of */i/, see §5.104(2), examples being: *eofor*, *feotor* ‘fetter’, *feotod* ‘fetched’. In Ps(A) back umlaut is extensive. Examples of *u*-umlaut include: *eofur* ‘bear’, *geofu* ‘gift’, *ofergeotul* ‘forgetful’, *-cweodulnisse* ‘utterance’. Examples of *a*-umlaut are especially frequent in the present tense forms of strong verb classes IV and V, thus *beorað* ‘they carry’, *aġeofað* ‘they give’, *eotað* ‘they eat’, *betreodað* ‘they tread’, and similar forms occur with *u*-umlaut in 1sg.pr.ind., such as *eotu* ‘I eat’, etc. In these verb classes forms with back umlaut are analogically extended to verbs with following /k/, such as *spreocu*, *spreocað* ‘speak’, and similarly for forms of *wreocu* ‘I avenge’, *-breocu* ‘I break’, including in all cases pres.part. forms, such as *spreocende*.⁶ The forms of Ru1 are similar to those of Ps(A)

except that there are a few undiphthongized forms, such as MtGl(Ru1) 18.19 *hefonum*, *setulas* ‘seats’, both due to competing forms with a front unstressed vowel, and cases, especially in strong verb classes IV and V, where the diphthong has been analogically levelled, for example, all forms of *etan* ‘eat’, *wesan* ‘be’, some forms of *beran*, *-ġetan*.⁷

- (3) The earliest Nbr texts do not show back umlaut, hence CædH(M) *metudæ̃s* ‘creator’ gen.sg., CædH(DP) *hefun-* ‘heaven’, and the earliest example appears to be RuthCr *heafunæ̃s* gen.sg.⁸ The forms of the INbr texts closely resemble those of Ru1, subject to the Nbr developments of *eo* and *ea*, see §5.44. However, whilst the SNbr Ru2 has, like Ru1, see n7, analogical extension of the umlaut in strong class V verbs with following /k/, thus *spreocað*, *spreaca*, such extension is entirely absent in all INNbr texts.
- (4) In the early Kt charters examples of back umlaut of /e/ are common, as in *-ġeofan* ‘give’, *feola* ‘many’, *beġeotan* ‘obtain’, and also, with an intervening velar, *reogol* ‘rule’, *forespreoca* ‘advocate’. The later OccGl 49 has a mixture of forms, umlauted examples being: 175 *ġiofa* ‘gift’, 230 *onġiotað* ‘understand!’, 464 *neofan* ‘nephews’, together with a number with preceding *w-*, such as 21 *weogas* ‘ways’, 320 *weolan* ‘riches’, and 861 *ġeweolugad* ‘enriched’ and related forms; unumlauted examples include: 366 *ġefol* ‘gracious’, 304 *setol* ‘seat’, which may be due to suffix variation, 73 *etað* ‘they eat’, 1179 *forberan* ‘tolerate’, which may show levelling, and 52 *tela* ‘well’.

¹ LWS frequently has *feala* ‘many’, less often *feola*, alongside more usual *fela* (thus Ælfric has *feala* 14×, but no examples of *feola*), and there are occasional examples of *teala* ‘well’. The forms are not clearly explicable, see Brunner (1965: §110A5) for discussion and references. Chron(A) 530 *feala* may well be a scribal error, see Sprockel (1965: §7.8.4). CP(H) has a number of forms where *o* has been added either contemporaneously or at a later date, for discussion and references see Kim (1977: 181): 333.6, 391.26 *fe[o]la*, 449.6 *he[o]lan* ‘conceal’, 449.5 *he[o]lað*, 85.8 *he[o]fenlic* ‘heavenly’, and, after *w*, 331.6, 333.4 *we[o]lan* ‘riches’, 391.8 *we[o]lena*.

² *Ġeolu* ‘yellow’, which occurs in early texts as LRid 10 *ġoelu* with *oe* for *eo*, EpGl, ErfGl 1064 *ġe(h)olu* alongside more frequent *ġelu*, CorpGl *ġeolu* (2×) alongside *ġelu* (2×), and *meolu* ‘meal’, more often *melu*, are to be explained under §5.22n3, see further Ball and Stiles (1983: 16–18), and should not be taken as examples of back umlaut. A parallel explanation holds for *sme(o)ru* ‘fat’, *te(o)ru* ‘tar’, see §5.22n6.

³ Although such forms occur in both the present and the past, they presumably originate in the past, where *u*-umlaut could occur. Another form often cited is HyGl 3.41.1 *underwreopod* ‘supported’, perhaps nWS in origin.

⁴ A number of words are usually held to demonstrate that in WS *ie* < **e* by palatal diphthongization could then be back umlauted to *io*, later *eo*, cf. Bülbring (1902: §253), Luick (1914–40: §227), Campbell (1959: §220), Girvan (1931: §105), Brunner (1965: §111A8). The usually cited forms are: *ġeolu* ‘yellow’, *ġeoloca* ‘yolk’, *ġeolstr* ‘pus’, *ġiofol*, *ġeofol* ‘generous’, *ġeofu* ‘gift’, *onġiotan* ‘understand’, *ċeole* (< *ċeolan*) ‘throat’, *ċeorian* ‘mutter’. But all except the last are otherwise explained. For *ġeolu*, and hence *ġeoloca*, *ġeolstr*, see n2 above; *ġeofu*, *ġeofol* do not occur in EWS except

CP 321.13 *giofol* nor in Ælfric or Wulfstan and thus are presumably from another dialect without palatal diphthongization; the same is true of *ceole* and forms; CPLetWærf 26 *onġiotan* is also an isolated form, and in any case showing umlaut in a position abnormal for WS. But *ceorian* is common in WS and not easily explicable.

⁵ Other possible examples in EpGl, ErfGl are: *geolu*, see above, n2; EpGl 573, ErfGl 573a *laxbe olor*, *laxe olor* 'scale, balance', against EpGl, ErfGl 607, 988 *helor* and CorpGl 1169a *laxbe holor*, 1177, 2041 *heolor*, which suggest that 573(a) and CorpGl 1169a are corruptions; ErfGl *beoso* 'crimson', cf. EpGl 411 *baeso*, CorpGl 877 *beosu*, which might show either an archaic spelling of the back umlaut of *æ*, see §5.45n1, or the back umlaut of /e/ from *i*-umlaut, see Wynn (1956: §47n6).

⁶ The analogy is extended to the derived noun *gespreocu* 'talks' (6×) alongside *gesprecu* (1×). Ps(A) also has *weagas* 'ways' (3×), *weogum* (1×) alongside usual *wegas*, where the umlauted forms may show Kt influence, see Ball (1970: 465) and §5.45n4.

⁷ On the other hand Ru1 has analogical extension of the umlaut similar to that found in Ps(A) in *spreocan*, *spreocap* beside *sprecan*, *sprecap*.

⁸ A number of proper names in LVD, Bede show back umlaut, but these are of uncertain value. LRid *goelu* is not relevant here, see n2 above.

5.106 Because of the operation of earlier sound changes, principally the restoration of *a* (§§5.35ff.), *æ* could usually only come to stand before a back vowel in the following syllable and hence be subject to back umlaut in those dialect areas where second fronting (§§5.87ff.) had taken place. Such dialects are discussed under (1) below, and other examples of the back umlaut of /æ/ are discussed under (2) below.

- (1) In the dialect of Ps(A) examples of the back umlaut of /æ/ due to second fronting are frequent and regular before all consonants except the original velars /k/ and /ɣ/.¹ Hence examples of *u*-umlaut include: *earun* 'they are', *fearu* 'I go', *heafuces* 'hawk' gen.sg., *feasum* 'fringes' dat.pl., *featu* 'vessels', *ġeatu* 'gates', *feadur* 'father' gen.sg. Examples of *a*-umlaut include: *spearað* 'he spares', *ġehleadað* 'you (pl.) draw', *ġedeafenað* 'is fitting' and, especially, all forms of weak class 2 verbs even where no back vowel follows and where the umlaut is analogically extended, hence *ġedeafien* 'they may consent' (with ⟨d⟩ for ⟨ð⟩), *gleadie* 'he may gladden', see further §5.111(2). The earliest Merc glossaries, even when they show second fronting, are generally too early to show back umlaut, and there are no certain examples of the change in EpGl, ErfGl.² In CorpGl, however, whenever /æ/ results from second fronting this is then subject to back umlaut, so that the contrast is between forms with *ea* and forms with *a*.³ Typical examples are: *-fearu* 'journey', *geabuli* 'tribute', *cleadur* 'rattle', *geaduling* 'companion' (< **gaduling* without *i*-umlaut, cf. §5.76), against *-faru*, *gaful-* and many other forms. It is notable that in CorpGl back umlaut occurs even when the intervening consonant is an original velar, thus *beago-* 'enclosure', *reagufinc* 'finch', *weagat* 'he wags', *onseacan* 'deny', *-ðeaca* 'roof'.⁴ These examples are to be explained by postulating either that in the

dialect of CorpGl velar fronting occurred before second fronting or that the product of second fronting in this dialect was insufficiently front to cause velar fronting, see Kuhn (1939: 13–14), also §5.103. Of the other Merc texts Ru1 has only 16.17 *ondsweorode* ‘he answered’, with *eo* for *ea*, see §5.45, 21.33 *heage* ‘enclosure’ (= *heagan* acc.sg.),⁵ and probably 14.6 *pleagade* ‘he played’, cf. pl. *plagadum*, although alternatively back umlaut of /e/ might be assumed, cf. WS *plegode*. In late Merc OccGl 54 has 37.670 *hælwearum* ‘inhabitants of hell’ dat.pl. and Chad has *earun*, *andswearede* and *eadusan* ‘adze’, but the occurrences are rare, see Vleeskruyer (1953: 109–10).

- (2) Outside these Merc texts /æ/ could only occur in conditions of back umlaut when subject to early shortening, the only example there being Nbr *leassa* ‘less’ < *læssa*, or with suffix variation. The most important example of the latter is WS *ealu* ‘ale’ < **ælu*, where /æ/ is due to *i*-umlaut in inflected **alupi*,⁶ whilst Nbr has a number of possible but doubtful cases.^{7,8}

¹ Since second fronting fails before [t], see §5.87, and since Gmc **a* + nasal is not subject to second fronting, there can be no regular examples of back umlaut of */æ/ with an intervening *l* or a nasal. Hence forms such as *bealu* ‘bale’ are due to breaking in inflected forms, see §5.22n3.

² EpGl 736 *uicingsceadan* ‘pirate’, 853 *sceaba* ‘plane’, 902 *sceadu* ‘shade’ are often regarded as relevant examples, for instance, Luick (1914–40: §§231A3, 253), Campbell (1959: §207), Brunner (1965: §96.2dA7). Although the forms are ambiguous, they are probably better regarded as examples of the so-called palatal diphthongization of /a/, see §§5.69–70, as suggested by Girvan (1931: §100A3), Wynn (1956: §47.4), and Ball and Stiles (1983: §§3.2.2, 5), see further references therein. Since NNbr has frequent examples of such palatal diphthongization, SNbr has some examples, and the ‘NMerc’ Ru1 shows sporadic instances, the assumption can be justified dialectally. EpGl 715 *breacca* is dubious and for EpGl 652 *bearug* ‘barrow-pig’ see Ball and Stiles (1983: §3.2.2 and App.).

³ The single exception is 873 *-læppan* ‘skirts’ with an intervening geminate.

⁴ Note also LorGl2.34 *heagospinnum* ‘cheeks’ dat.pl., 62, 51 *lundleogan*, *-leogum* ‘kidneys’, the latter with *eo* for *ea*.

⁵ Not to be taken here is MtGl(Ru) 21.5 *tēoma*, an adjective from *tēam* ‘team’. And Ch 204 *biobbanne* ‘have’ infl.inf. is of uncertain value, being influenced by following *siollanne*.

⁶ So explained by Weyhe (1906: 78) and preferable to the assumption of Angl origin, as in Quirk and Wrenn (1957: §214).

⁷ Mainly poetical *cearu*, although note CP 302.9 *cearu*, is not to be taken as a further example, *pace* Campbell (1959: §208). The form is presumably Merc alongside WS *caru*, see further Brunner (1965: §108.5A4) and n8 below. For Nbr forms such as *ġefeastnadon*, see Campbell (1959: §208n6).

⁸ The majority of other cases must be regarded as due to Merc influence, particularly predominant in eKt: Ch 1482, 1510 *ðeafie* ‘I consent’, Ch 1482 *teapera* ‘tapers’ gen.pl., Ch 41, 1436 *earan* ‘they are’, alongside, for example, Ch 1197 *ġeðafie*. Both Kt and Nbr also have a number of names with back umlaut which may be attributed to their Merc origin. The most reliable WS example is Chron(A) 449 *ġeleapade* ‘invited’,

again probably due to Merc influence. *ÆGl* 8.35 *meatte* ‘mat’ < Lat *matta* in WGmc shows failure of restoration of *a* before a geminate and then back umlaut in the same environment, whilst *ÆCHom* I.29.430.2 *geaflum* ‘forks’ dat.pl. is from *geafel*, not *geafol*, see OED *yelwe*. Forms with back umlaut of /æ/ are a common feature of poetic texts, such as Beo *beadu*, *eafora*, *eafod*, *eatol*, *beafo*, *geheaderod*, *heafu*, see Cameron et al. (1981: 43–4).

5.107 In nWS there are a number of examples of back umlaut where more than one consonant intervenes, most, but not all, examples involving geminates. In Nbr the relevant examples are: Ru2 *ionna*, *ionnað* ‘womb’, Ru2, DurRitGl *bionna* ‘within’, LiGl *sodða* ‘after’ < **sioðða*, see §5.208, *sealla* ‘give’ and forms, with back umlaut of /e/ < */æ/ by *i*-umlaut, possibly also in Ru2, see Lindelöf (1901: §87), and, where the intervening consonants are non-geminate, LiGl *bihionda*, *bibianda* ‘behind’ (also Ru2 *bihionda*), *gioster* ‘yesterday’, with *io* for *eo*, cf. Ru2 *gestor*-. In Merc the relevant examples are Ps(A) *seoðan*, with orthographic simplification of the geminate, and Ru1 *seoþþan*. It is noteworthy, however, that there are a number of examples in Ps(A) where back umlaut of /æ/ (due to second fronting) takes place even with an intervening geminate or consonant cluster. Examples of the former type are: *leappan* ‘skirt’, *hneappade* ‘he slept’ and related forms, *eappultun* ‘apple orchard’, *westernsceaattum* ‘usury’ dat.pl. and related forms, *gneat* ‘gnat’ (from pl. forms); examples of the latter are: *eascan* ‘ashes’, alongside *escan* from nom.sg., *gongeweaftran* ‘spiders’. In Kt we find OccGl 49 *seoððan*, Ch 1482 *sioððan*, against Ch 1195, 1200 *siððan*. Before groups Ch 1188 has *siondan*, Ch 1508 *seondan* ‘they are’ beside more frequent unumlauted forms. The position in WS is more obscure. Only two words are at issue,¹ *siððan* ‘after’ and *sindon* ‘they are’, these being the usual EWS forms beside rare *sieððan*, *siendon*, most probably with ⟨ie⟩ for ⟨i⟩, see §5.165. On the other hand the usual forms in LWS are *syþþan*, *syndon*, and in the latter case at least back umlaut is unlikely to have occurred.²

¹ But there are the unexplained EWS forms Met 2.4 *geocsa*, Lch II (1) 18.1.1 *geoxa* ‘sobbing, ?hiccough’, cf. EpGl, ErfGl 958 *iesca*, where the normal development is **gesca* > **giesca* > *ghisa*, with palatal diphthongization, see Weyhe (1908: 171).

² This is because, as has already been noted, see §5.104(1) and also §5.111 below, back umlaut is regularly levelled in WS. The ⟨y⟩ spellings could have two sources: (1) *i* > *y* in LWS, see §5.173; (2) **ie* > *y* in LWS, see §5.167. If the former is the case, then clearly back umlaut is uninvolved. If the latter is the case, then there would have to have been a special development of **io* > **ie* > *y*. For further discussion see §5.167.

(b) *Combinative back umlaut*

5.108 As has already been stated in 5.103, when a short front vowel¹ is immediately preceded by /w/, then this /w/ frequently has the effect of

retracting that vowel to the corresponding back vowel, rather than mere diphthongization. It is important to note that this change is often lexically restricted and even in the case of individual lexemes diphthongized and undiphthongized forms may stand alongside retracted forms.

¹ It would appear, however, that /æ/ is never so affected, although this may simply be because combinative back umlaut is relatively infrequent in the dialect of Ps(A), see further below.

5.109 In all dialects the combinative back umlaut of /i/ > /u/ appears to be restricted to examples of *u*-umlaut and possible examples of combinative *a*-umlaut are to be otherwise explained.¹ The details of the changes in each dialect are listed below. It is especially important to note that although in most dialects the change is quite restricted in its operation, as indicated in §5.108, in WS the change is extremely widespread. This, of course, is in marked contrast to the dialect situation with respect to the operation of simple back umlaut, which is least frequent in WS.

- (1) The most noteworthy feature of the operation of combinative *u*-umlaut in WS, apart from its regularity, see above, is that it usually takes place regardless of the nature of the intervening consonant, and therefore examples of the change can be found with an intervening dental, such as *wudu* ‘wood’, *wuduwe* ‘widow’, (*w*)*uton* ‘let us’, *cwudu* ‘cud’, *swutol* ‘evident’, and even with an intervening velar, such as *wucu* ‘week’, *swugian* ‘be silent’. Frequently diphthongized or undiphthongized forms are found alongside the above, hence *weoduwe*, *widuwe*; *cweodu*; *sweotol*; *wicu*. Where no retracted forms are found, the preceding /w/ may still permit diphthongization beyond the normal limits for the dialect, as in *wiuton* ‘they know’ alongside *witon* and *swiocol* ‘treacherous’ alongside *swicol*.²
- (2) In the early Merc texts combinative back umlaut is extremely rare, the only examples being EpGl 430, LdGl 245 *uudu*-, alongside many examples with /i/. By the time of CorpGl, however, as with simple back umlaut, the change is much more frequent, for example, *uudu*-, *cudu* ‘cud’. In Ps(A), in contrast, the change is infrequent, occurring only in *wudu*, contrasting with *weotun* ‘they know’ (see also n1), *sweotullīce* ‘manifestly’ and even undiphthongized *widwe* ‘widow’. Ru1 has *wutan* ‘know’ pr.pl. alongside equally frequent forms such as *witan* and also *wutu* ‘let us’. Note also MtGl(Ru1) 23.14 *widuwana* ‘widows’ gen.pl.
- (3) The earliest Nbr texts show the first examples of combinative back umlaut in Bede(M) *derauuda* ‘deer wood’ dat.sg. (< *wudu*), RuneAuzon *wudu*. The significance of these forms is uncertain, see further §5.112.

In the later Nbr texts the principal forms are: *wuton* ‘let us’, *wuton* ‘they know’ and hence various other forms of the same verb, *wutodlice* ‘indeed’, *wudu* ‘wood’. But diphthongized forms can also occur, such as *wiotodlice*, and some forms only so occur, such as Ru2 *giswiopornisse* ‘cunningness’ acc.sg. Note also that *widwe* ‘widow’ is the regular form.

- (4) The only example of such umlaut in Kt is CollGl 49.204 *wuton* ‘let us’. Note that Ch 328, 1195 have *wiada*, *weoda* ‘wood’ where usually analogy from the nom.sg., in which combinative *u*-umlaut might have been expected, takes place. The implication is that such umlaut was rare in the dialect, although see Gabrielson (1912: §§396, 287) for ME evidence which might suggest that combinative back umlaut occurred in Kt also.

¹ Combinative *a*-umlaut of /i/ is held to occur in the following Nbr forms: *wuta* ‘know’, *wuta* ‘wise man’, where it is most probable that *-u-* has been transferred from *wuton* ‘they know’. Similarly frequent WS *wuda*, also in Ps(A), has the vowel of *wudu*. CP *gewuta* ‘witness’ (2×) and *wutan* ‘wise men’ (1×) may have the same source as the Nbr forms above, but are scarcely of significance.

² Other forms, such as *swicon* ‘they deserted’, which never show either retraction or diphthongization, are to be explained as examples of analogical levelling, see further §5.111.

5.110 In all dialects the combinative back umlaut of /e/ > /o/ is even more restricted than the parallel umlaut of /i/. In general only a few words are affected, the principal of which are as follows. In WS we find *worold* ‘world’, *swolod* ‘heat’, and, with an intervening cluster, *swostor* ‘sister’.¹ All such forms occur alongside other forms with *-eo-*, such as *weorold*, etc. The only other dialect with such forms is NNbr, where LiGl, DurRitGl have *woruld* and LiGl has *worud* ‘troop’ (= WS *weorod*, *werod*). In all Nbr texts, however, there is apparently combinative *a*-umlaut in *wosa* ‘be’ (= WS *wesan*), and LiGl has *cwoða* ‘say’ alongside *cweoða*, *cwoeða*, and other forms. The extent to which these latter examples are to be connected with back umlaut must be uncertain.^{2,3}

¹ Both *swostor* and *sweostor* presuppose earlier **swestur*, in contrast to Angl *swester*, *swoester* from earlier **swester*. The WS form is unusual and unexplained.

² Luick (1914–40: §222.2) sees *wosa* as due to monophthongization of **weosa* in weak-stressed environments, which claims no more than an unexplained special development. On the other hand, the development cannot be through rounding after /w/, that is, **wesa* > **woesa* >? *wosa*, since Ru2 almost totally lacks that change, see §5.178 and Lindelöf (1901: §93). The definitive status of the observed changes cannot therefore be ascertained.

³ In NNbr combinative back umlaut is unknown outside the above examples and the usual development must have been diphthongization to *eo*, that is, **weras* > *weoras* ‘men’, with later unrounding to *wearas*, see §5.44(2). But there is then a later

development giving *wæras*, *waras*, etc., for which see §5.179. There is no need to assume that such forms entirely escaped back umlaut, as Campbell (1959: §210.2n4) seems to imply.

(c) Summary

5.111 The operation of back umlaut has important morphological consequences in four areas: (1) various noun (and hence adjective) inflections; (2) the weak class 2 conjugation; (3) the preterite plurals of some strong verbs; (4) the present tense of other strong verbs. These are discussed separately below.

- (1) Back umlaut can cause morphological alternation in two different types of noun inflection. The first type is where the nom.sg. does not suffer umlaut, but (usually in the plural) some other case has a following back vowel which potentially causes umlaut. The most common examples involve the *a*-decl. neut. nom.pl. *-u* and dat.pl. *-um* (all declensions). In WS in such cases the umlaut is regularly levelled, for example, *clifu*, *clifum*. In the Angl dialects, on the other hand, the change is levelled only in a minority of instances. Indeed, in Ps(A) only unlevelled forms are found, such as *sceopu*, *sceopum* 'ships'. In Ru1 forms such as *gewriotu* 'writings' are only slightly less frequent than levelled *gewritu*. In Nbr texts unlevelled forms greatly outnumber levelled forms. The limited evidence of Kt suggests a fairly equal alternation between phonological and analogical forms. The second type is where the nom. sg. ends in inflectional *-u*, which is absent elsewhere in the paradigm. In fact the only frequent example is *wudu* 'wood', in which case combinative back umlaut is extended to forms with following *a*, see §5.109. However, since this word shows combinative back umlaut even in those (Merc) dialects where the change is rare, the change may be a special property of the lexeme.
- (2) In verbs belonging to weak class 2 a back vowel directly follows the stem in 2 and 3sg. pr.ind., where it is /a/, and the preterite, where it is /u/ in WS and /a/ in nWS, see further §3.34. Elsewhere an *i*-umlauted vowel follows the stem. Hence the paradigm is liable to considerable analogical restructuring. In EWS there is both levelling and extension, so that alongside regular *clipian*, *cleopode*, forms of 'call', one can also find both *cleopian* and *clipode*. In LWS it is more usual for the umlauted forms to be levelled out, although the other variations remain in a minority of cases. In Merc Ps(A) extends the back umlaut to all forms, hence *cleopiu* 'I call' etc., and the same appears to be true for the other Angl texts written after the time of the change. In Kt no such extension takes place.

- (3) In verbs of strong class I it might be expected that a preterite plural form such as *drifon* ‘they drove’ should undergo back umlaut. In WS, however, undiphthongized forms are always found. In the Ps(A) dialect of Merc, in contrast, not only are all such forms diphthongized,¹ but forms with an intervening velar, which would not usually show the change, do so, see §5.104n10 for examples. In Ru1 levelling is frequent, but see §5.104n11, and in Nbr there are both levelled and unlevelled forms.
- (4) Similarly, in strong classes IV and V back umlaut should appear in the pr.inf., 1sg. pr.ind., and the pr.pl.ind.,² but in fact the position is broadly parallel to that immediately above, except that the absence of umlauted forms in the standard WS texts is to be ascribed to the failure of /e/ to be *a*-umlauted. CollGl 49.73 *etað* ‘they eat’, 1179 *forberan* ‘tolerate’ suggest that in Kt, where such umlaut could take place, see §5.105(4), the umlaut was usually levelled.

¹ With the exception of *edwiton* (3×) ‘they reproached’.

² At least in those texts where the inflectional ending was usually *-u* and not *-e*.

5.112 Since the evidence of the earliest Angl texts shows that back umlaut is there only occasionally represented, whereas in texts such as CorpGl and Ps(A), as well as the INbr texts, back umlaut is fully regular, it is safe to assume that back umlaut only began to be implemented at or about the time of the earliest texts. Furthermore, the chronology of back umlaut relative to sound changes normally considered to be prehistoric is easily established. For example, where forms undergo palatal diphthongization they do not undergo back umlaut, hence examples such as *gyfu* ‘gift’, see further §5.105n4. There are also frequent examples where an *i*-umlauted vowel comes to stand before a back vowel, due to variation in a suffixal vowel. Examples such as *eosol* ‘ass’ < Lat *asilus* are given in 5.105(1). Furthermore, back umlaut must be later than second fronting, since the /æ/ produced by second fronting is regularly umlauted, see here §5.106(1). The only area of difficulty is the relationship between smoothing and back umlaut. However, the discussion in §§5.102 and 103 shows that smoothing must have been the earlier change. In the case of back umlaut itself, although there is no justification for asserting different chronologies for *u*-umlaut and *a*-umlaut, it is often asserted that combinative back umlaut was earlier than simple back umlaut, see, for example, Luick (1914–40: §233), Girvan (1931: §104A2), Brunner (1965: §114A7), Campbell (1959: §218). The evidence for this rests on the early attestation of *wudu* in Bede(M) and EpGl, texts which do not usually show simple back umlaut.^{1,2} But since *wudu* can appear even in a text such as Ps(A) which otherwise does not show the change, see §5.109(2), it is dangerous to draw any general conclusions

from what may well be a lexical idiosyncrasy. There can therefore be no reason to suppose that combinative back umlaut was generally earlier than simple back umlaut or even, as Stiles (1983) speculates, that that was the case for Nbr but not Merc.³

¹ But note ErfGl 521 *uuliuduūac*, discussed in §5.104(2). For eNbr see §§5.104(3), 105n8.

² The often-cited EpGl, ErfGl 557 *uulluc* ‘wrapper’, not ‘whelk’, is cognate with OHG *wulluh* and not therefore a relevant example, see Stiles (1983) and references therein.

³ In WS and Kt the situation is otherwise indeterminate, but it may be supposed that the same situation obtained in all OE dialects.

X Palatal umlaut

5.113 In WS dialects especially, and to varying and lesser extents in the other dialects, the short diphthongs *io*, *eo* were monophthongized and raised to /i/ when directly followed by /x/ plus dental consonant, that is, /t, θ, s/. The evidence of Kt, where, unlike WS, /e/ could occur in these environments as a result of the *i*-umlaut of */æɑ/, for example, **bleahið* > *blehð* ‘he laughs’, see §5.82, shows that /e/ was similarly raised to /i/. The only restriction on the change appears to have been that the consonant cluster must not have been followed by a back vowel. Typical examples in WS are *cneoht* > *cniht* ‘boy’, **ġeweohht* > *ġewiht* ‘weight’, cf. *cneohtas* ‘boys’, and similar forms are found in Kt together with examples such as **hlehð* > *hlihð* ‘he laughs’. Such a sound change has clear similarities to Anglian smoothing, see §5.93. In the Angl dialects, however, examples of this change, usually known as palatal umlaut, are only to be found in relatively late Merc texts, such as Ru1 *neht* > *niht* ‘night’. The similarities to Anglian smoothing, and the fact that this sound change involves not only monophthongization but also raising, strongly implies that in these positions the originally velar /x/ had, as in Anglian smoothing, developed a palatal allophone, that is, [ç], see Luick (1914–40: §684, esp. A2). Further evidence that the consonant group had palatalized comes from the failure of the change to take place when a back vowel followed, as in *cneohtas* above. We may therefore suppose that the change took place before [ç] + dental consonant.¹ The internal structure of the changes as they affect the short diphthongs is rather less certain in several respects. Firstly, it is unclear whether in WS /iö/ and /eö/ had already merged by the time of palatal umlaut, see further §§5.118, 161. Secondly, it is uncertain whether /iö, eö/ directly shifted to /i/, or whether they first monophthongized and then /e/ < /eö/ shifted to /i/, or whether /iö, eö/ first shifted to the sound represented by ⟨ie⟩, probably either /iý/ or /ië/, see §2.36. A choice between the first two alternatives may be impossible, given the absence of intermediate ⟨e⟩

spellings in WS, such as ***cneht* for *cniht*. On the other hand, Kt has examples suggesting that monophthongization did indeed occur first, see §5.115. The evidence for an intermediate stage *ie* principally consists of occasional spellings with ⟨ie⟩, such as CP 287.10 *cnieht*, CP 341.18 *wriexle* ‘change’, but these appear to be the only such spellings of relevant forms in the major EWS texts and presumably are merely instances of ⟨ie⟩ for ⟨i⟩, see §5.165.² It is therefore best to assume that palatal umlaut consisted firstly of monophthongization (where appropriate) of the short diphthongs /iö, eö/ and then raising of /e/ to /i/ before a palatalized consonant everywhere. The change may be approximately characterized as follows, where for convenience the two shifts are taken together:

$$\left[\begin{array}{c} \text{V} \\ -\text{back} \\ -\text{long} \\ -\text{low} \end{array} \right] \left[\begin{array}{c} \text{V} \\ -\text{syll} \end{array} \right] \Rightarrow [+high] \emptyset / \text{---} \left[\begin{array}{c} \text{C} \\ +\text{high} \\ -\text{back} \\ +\text{cont} \end{array} \right] \left[\begin{array}{c} \text{C} \\ +\text{cor} \end{array} \right] \left\{ \begin{array}{c} \left[\begin{array}{c} \text{V} \\ -\text{back} \end{array} \right] \\ \emptyset \end{array} \right\}$$

¹ An apparent exception to this is consistent *meox*, *miox* ‘dung’. The failure of palatal umlaut here is best explained by presupposing the shift of /xsl/ > /ksl/, see §7.6, 9. It must therefore be supposed that this shift takes place earlier when word-final than when word-internal, cf. *mixen* ‘dung-heap’, *wrixl* ‘change’ and see Luick (1914–40: §271A1). There is no need to invoke an analogical explanation as in Campbell (1959: §305), and very rare *mix* (1× only apparently), *myx* are of no significance.

² EWS *siex* ‘six’ and related forms are not relevant here, for LWS has both *six* and, less frequently, *syx*. But *syx* could not have developed from /i/ due to palatal umlaut, see Luick (1914–40: §271A1,3), Brunner (1965: §122A2), also §5.167, and, for the contrary view, Sprockel (1965: 32). Further, by n1 above, *seox* should not undergo palatal umlaut. *Siex* must therefore be due to *i*-umlaut of /eö/ in inflected forms, but given LWS *six* we may have to suppose that there were competing forms in EWS with and without palatal umlaut, see also §5.115. Nor can EWS *ryht* ‘right’ < *reohht* be relevant here, since /y/ is most probably due to rounding of /i/ after /r/, see §5.170 and references, cf. Campbell (1959: §305n2) for another view.

5.114 In EWS palatal umlaut regularly occurs, so that we find *cneohht* > *cniht* ‘boy’, *reohht* > *riht* ‘right’,¹ and similarly *wriexl* ‘change’, *Wiht* ‘Wight’, *Piht* ‘Pict’,² *gewiht* ‘weight’. Alongside such forms are others without palatal umlaut, which are to be explained under §5.117. LWS texts show the change equally, hence LWS *cniht*, etc. There are no examples in WS of the change affecting long diphthongs, hence *lēohht* ‘light’ and similar forms are normal. Additionally, the personal name element *-byrht*, *-birht* from older *-beorht*, also found as a first element, suggests either that palatal umlaut could also occur if there were an intervening liquid, or that the group *beor-* was subject to a special development. In support of the latter view are other forms such as Chron(A) 931,933 *Byrnstan*, see Campbell (1959: §305n1) and cf. Brunner (1965: §122A3).³

¹ *Riht* only occurs in derived forms in EWS, such as *unrihtwis* ‘unrighteous’, with the simple form being *ryht*, see §5.113n2, but in LWS the normal form is *riht*.

² The word only occurs when an inflectional back vowel follows, for example, *Pihtas* alongside expected *Peohtas*, see further §5.117.

³ Any explanation from palatal umlaut which supposes that this example shows that a liquid may intervene, see also §5.115, must presume that frequent metathesis to *byrht*, etc. does not precede the umlaut. The explanation of forms with /y/ may either be parallel to that for *ryht*, see §5.113n2, or due to the labializing effect of /b/.

5.115 Among the early Kt charters Ch 1200.5 has *rehtlicast* ‘most right’ alongside 1200.14 *reohte* ‘right’ dat.sg., and Ch 1482.62 has *sex* ‘six’ (2×), see §5.113n2. These cases would seem to confirm that the first stage of palatal umlaut was monophthongization. Indeed the later OccGl 49.36 *gēnihtsumiað* ‘they abound’ may suggest that Kt /e/ < /y/ could undergo the raising process, see Williams (1905: §54), and 1151 *hlihð* ‘he laughs’ (and, by analogy, 11 *hlihhe* ‘I laugh’) shows raising of /e/ which is the result of *i*-umlaut of a diphthong.¹ Other examples in the same text which show both monophthongization and raising include: 344 *wiht* ‘weight’, 702 *gēwric[s]l* ‘change’, 1067 *cnihtthade* ‘knighthood’, 169 *unrihtemere* ‘adulterer’, note also 1175a *gērihta* ‘rights’ with a following back vowel. Finally in the same text 509 *tirhð* ‘he mocks’ may indicate raising of /e/ even when a liquid intervenes, see §5.114n3 but also n1 below.

¹ But these, and *tirhð* below, may simply be examples of ⟨i⟩ for ⟨e⟩, occasionally found elsewhere in the same text, such as 724 *slicc* ‘sledge-hammer’, 698 *hinrað* ‘he is hungry’ (with ⟨i⟩ for Kt *y* > *e*), compare with these 920 *dehtnunge* ‘disposition’ with ⟨e⟩ for ⟨i⟩. Notably OccGl 49 has cases where *ī* and *ē* are similarly confused, although examples of palatal umlaut of long vowels are extremely rare throughout OE. Thus we find *afligð* ‘fled’ alongside the expected form in 756 *gebēgð* ‘he curves’, and 353 *lēcetera* ‘hypocrite’ for usual *licettera*.

5.116 The only examples of palatal umlaut in Angl are to be found in the late Ru1 and OccGl 54. In the former occur *riht* alongside *reht*, *sihpe* ‘behold’, and *niht* ‘night’.^{1,2} OccGl 54 has both *riht* and *reht* but *cniht* (3×). The twelfth-century LS 3 (Chad) has a mixture of raised and unraised forms. Nbr texts show no instances of the change.

¹ But Ru1 always has *cneht* ‘boy’, leading to, for example, MtGl(Ru) 2.14 *he arisende gēnom þone cneht ond his mōder on niht*. MtGl(Ru) 27.45 *syxta* can scarcely be an example of the change, see §5.113n2.

² Ru1 also has two words apparently showing palatal umlaut of long vowels, namely *liht* ‘light’ alongside *lēht*, *lēoht* and *nihste* (1× only) alongside frequent *nēhstum*, *nēhstum*, etc. But such forms may show the operation of palatal umlaut after shortening before consonant groups, as suggested by Campbell (1959: §310), see also §5.199.

5.117 As pointed out in §5.113, palatal umlaut occurs only where the consonant cluster is not directly followed by a back vowel, hence contrasts

such as *cniht* ‘boy’, *cneohtas* ‘boys’. Therefore there is considerable scope for analogical levelling and extension, and in EWS, where levelling away of the change is preferred to extension, we find forms such as *cneoht* alongside *cniht*. In LWS, on the other hand, extension of the umlaut is regular, hence *cniht*, *cnihtas*.¹ Notable here is the verb *feohtan* ‘fight’ and forms, which in both EWS and LWS almost always shows no umlaut, forms such as *fihtan* occurring rarely and generally in less reliable late texts.

¹ In view of the regularity of LWS *cnihtas*, etc. it might be supposed that in LWS even in those forms the consonant cluster had become sufficiently palatalized to permit palatal umlaut to take place, rather than ascribe the shift to analogy.

5.118 The chronology of palatal umlaut in WS is somewhat unclear because of its lack of interaction with other changes. Thus the diphthongs /iō, eō/ would both become /i/ by palatal umlaut whether the merger of the two diphthongs, see §§5.155ff., took place before or after the current change. Similarly, the occlusion of the /x/ > /k/ in the group /xs/ is of uncertain date, see §7.9, and hence of little help. On the other hand, the evidence of spellings in the early texts implies that the change must have taken place by the ninth century. Similarly the monophthongization involved is attested in ninth-century Kt charters, although the raising is not attested until OccGl 49. In Merc the change is not seen even in the ninth-century Ps(A), and it seems not to have spread to Merc dialects until the tenth century. ME evidence, see Jordan (1974: §69), shows that the change later spread to Nbr also, although not always, but this is clearly post-OE. The change, therefore, was earliest in the S. and only gradually spread northwards.

XI Palatal monophthongization

5.119 In WS at least¹ there appears to be a somewhat sporadic tendency for both long and short /æa, æɑ/ to be monophthongized to /e(:)/ when preceded by a palatal consonant, that is, *ċ*, *ġ* or *sc̄*, or followed by an original velar, that is, *k*, *g*, or *h* (= /x/), or by a palatal consonant due to palatalization.^{2,3} Typical examples of each case are: *cēas* > *cēs* ‘he chose’, *ċearf* > *ċerf* ‘he cut’, *ġēar* > *ġēr* ‘year’, *ġeaf* > *ġef* ‘he gave’, *scēap* > *scēp* ‘sheep’, *scēaft* > *scēft* ‘shaft’, *bēacon* > *bēcon* ‘beacon’, *ēage* > *ēge* ‘eye’,⁴ *hēah* > *hēh* ‘high’, *seah* > *seh* ‘he saw’, *smēaganne* > *smēganne* ‘think’ infl.inf., *onġeagn* > *onġegn* ‘against’.⁵ In the vast majority of instances the monophthongal forms exist alongside more numerous forms with the original diphthongs. Since original /æ(:)/ as in *lægon* ‘they lay’, *bæc* ‘back’ was not raised, it must be assumed that the first element of the diphthong was either originally higher than /æ(:)/ or was raised during the monophthongization;

compare the processes involved in palatal umlaut, see §5.113, also §2.34, and Bliss (1950: 85). The monophthongization before an original velar bears clear similarities to palatal umlaut and may well be explained on the same grounds, with the relative infrequency of the shift due to the fact that the diphthong involved is low and thus less likely to palatalize the following consonant. But, on the other hand, the monophthongization after palatals is clearly related to the process of palatal diphthongization, see §5.49 and, for examples of Nbr raising after palatals, §5.54. It is tempting to assume, therefore, that the changes under discussion here are an extension of palatal diphthongization, that is, that the sequence **ġē̄r* > *ġē̄ar* > *ġēr* reflects an intensification of the original change. For this reason it may be preferable to call this change palatal monophthongization, rather than the more usual 'Late West Saxon Smoothing'.⁶ Clearly, although the change bears close similarities to both smoothing and palatal umlaut, it differs crucially in that the diphthong is raised and monophthongized in the environment of not only a following palatal but also a preceding palatal. The change may be approximately stated as follows:

$$\left[\begin{array}{c} \text{V} \\ \text{-back} \\ \text{+low} \end{array} \right] \left[\begin{array}{c} \text{V} \\ \text{-syll} \end{array} \right] \Rightarrow \text{[-low]} \emptyset / \left[\begin{array}{c} \text{C} \\ \text{+high} \\ \text{-back} \end{array} \right]$$

¹ Apparent examples in the early Kt charters, such as frequent *āc* 'also', Ch 41.19 *hægȝðe* place-name, alongside 41.3 *hægȝðe*, Ch 1510.24 *bægmond* personal name, are most probably due to Merc influence, namely smoothing, see §5.99n7, but OccGl 49 has a few examples of the change: 1035 *ðēh* 'although', 954 *smēgan* 'consider', 52 *meht* 'you may', beside other forms such as 1119 *hēah* 'high', etc. There appear to be no cases, however, of a preceding palatal causing the change in Kt. Naturally the change is not observable in the Angl dialects.

² But in this last case the only consonant which is associated with the change is /j/, examples of palatalized /k/ and /sk/ being wanting.

³ Monophthongization of apparent diphthongs by palatal diphthongization of back vowels is not found, hence *ġeāra* 'formerly', *sċeadu* 'shadow', etc. In many cases this must be because no diphthong was actually present, see §5.69 for discussion of the diacritic status of ⟨e⟩ in forms such as *sċeadu*, and in the type represented by *ġeāra* the change would not take place even if it were diphthongal, since the first element would be [-low] already, see §5.61. There is no need to suppose, as does Campbell (1959: §313), rising diphthongs in these cases.

⁴ There appear to be no examples of monophthongization of short /*ǣ*/ before /j/ (< */*ȝ*/).

⁵ In this case the change may have taken place before loss of /j/, that is, *onġæġn* > *onġēn* > *onġēn*, but see further §§5.123, 128.

⁶ The term 'Late West Saxon Smoothing' is also inappropriate since it wrongly implies that the change did not take place in EWS, see further §5.120.

5.120 Examples of palatal monophthongization in EWS are somewhat sporadic and variably represented in the texts. In CP the chief examples

are: 191.11 *gere* ‘certainly’, *forġet* ‘he forgot’ (2×), 113.14 *mehte* ‘he could’, *onġēn* ‘against’ (2×), *sċel* ‘he must’ (2×), CP(C) 36.7 † *pleh* ‘he risked’, 262.7 † *unscēðfulliċe* ‘innocently’, and, with long vowels, CP 103.15 *ðēh* ‘although’, CP(C) 152.13 † *smēġeanne* ‘consider’ infl.inf. Chron (A) has only 878.12 *onġēn* and *Andredescēster* place-name. These forms all exist beside an overwhelming preponderance of diphthongal forms. In addition CP has a slightly higher proportion of cases where the preterite of irregular weak class 1 verbs shows monophthongization, for example, *rehte*, *rehton* ‘he, they narrated’, *lehte* ‘he moistened’, *astrehte* ‘he stretched out’, beside *reahhte*, *leahhte* etc. Since such monophthongized forms are general OE it is usually assumed that they have been formed on the analogy of the present tense (*reċċan*, etc.), see Brunner (1965: §122A6).¹ In Oros the monophthongization occurs more frequently, and *hēh* ‘although’ occurs 114×, *hēah* 24×, note also always *flex* (2×), never *fleax*, see Bately (1980: xli). Other examples, such as *forġef* ‘he forgave’, *onġet* ‘he realized’, *nēh* ‘near’, *ġēr* ‘year’, occur beside more frequent diphthongal forms.

¹ Or it could be that the phonological change was carried out here more frequently than usual due to the favourable morphological conditions, see Bazell (1974) for some similar cases but cf. §5.121.

5.121 In LWS the best mss. of Ælfric show scarcely any signs of monophthongization and thus we find consistent *ċeaster* ‘castle’, *sċeal* ‘he must’, *ġēar* ‘year’, *hēah* ‘high’, *eahta* ‘eight’, *onġēan* ‘against’, etc.¹ A similar situation obtains in WHom, but here should be noted *hēh* ‘although’ 11× against *hēah* 54×. In various other texts the monophthongization is more frequent, although often still a minority form. Thus Chron(C) up to 977 has *ġēr* ‘year’ 6× against *ġēar* 24×. On the other hand Ælfric and Wulfstan, along with other LWS texts, consistently prefer such forms as *rehte* ‘he narrated’ to *reahhte*, supporting the view that the verbal forms are analogical, cf. §5.120 and n.

¹ Note, however, consistent ÆCHom, ÆLS *nēhġebur* ‘neighbour’ (10×), which may be due to the following /j/, see Luick (1914–40: §277). Much less significant is ÆCHomI 17 181.2 *hēh* against very frequent *hēah*.

5.122 There appear to be no major morphophonological implications of this change, and its infrequency suggests only that the change was never more than partially implemented.

5.123 The sporadic nature of this change makes it difficult to determine its relative chronology, but the available evidence suggests that it was clearly present in the dialect of the post-Alfredian Orosius and must have been known in Alfredian times also, if to a lesser extent. The Kt evidence, such

as it is, see §5.119n1, suggests that it did not reach Kt until the tenth century. All this points to a date for the change only a little after the date of palatal umlaut, see §5.118. Note that the form *onġēn* < *onġeaġn* could be due to either the preceding or the following palatal and therefore does not provide a dating relative to the loss of /j/, cf. Sprockel (1965: §1.1.10), who appears to hold a different view.

XII Compensatory lengthening

5.124 In all dialects, and at about the same time as smoothing, /x/ was lost: (1) between vowels; (2) between a vowel and a voiced consonant; (3) between a liquid and a vowel, see §§7.50–1. and §§5.100(2), 102 for discussion of the relative chronology. When /x/ is lost, then in at least cases (1) and (2) the preceding vowel is, if not already long, lengthened. Thus we find examples such as; Angl. **sibið* > **sī-ið* ‘he sees’, **feohes* > **fēo-es* ‘property’ gen.sg., cf. *feoh* nom.sg., **ġesiehmē* > *ġesīene*, *ġesīne* ‘visible’, **stiehli* > *stīle* ‘steel’. Typical type (3) examples, discussed further below, would include **feorhes* > *fēores* ‘life’ gen.sg., **wealhes* > *wēales* ‘foreigner’ gen.sg. The reasons for the vowel lengthening are most clearly observable in a form such as **stiehli*, where we may suppose an original syllable division as *stieh\$li*. Such a form adheres to the normal OE situation in which the rhyme of a stressed syllable contains at least two morae, that is, a long vowel or diphthong or a short vowel plus consonant, see §§2.80–2 for discussion. With the loss of /x/, however, the word no longer conforms to normal syllabic structure, and therefore the moric unit which /x/ originally filled is then filled by a lengthening of the preceding vowel.^{1,2} In other words, the preceding vowel is lengthened in order to compensate for the loss of the following consonant. Hence the process is known as compensatory lengthening. Exactly the same process occurs in forms such as **sibið*, to give **sī-ið* before the hiatus is resolved.³ However, in the type (3) cases, such as **feorhes* with the syllable division **feor\$hes*, it should be clear that loss of /x/ would result in *feor\$es* without compensatory lengthening, since the first syllable of the word would still have a bimoric rhyme. This is demonstrated by place-names such as PDE *Hale* < OE *hale* ‘nook’ dat.sg. < *halhe*, which if subject to compensatory lengthening would have given ***Hole*, see Quirk and Wrenn (1957: §189) and references therein, cf., however, Dietz (1970). On the other hand there is metrical evidence that compensatory lengthening could take place even in these forms, see Sievers (1893a: §77), Amos (1980: 34–6), and therefore lengthened and unlengthened forms often appear to co-exist, see §5.127 for further details, and, for a detailed analysis of poetic forms, Amos (1980: 37–9).⁴

¹ Although the evidence for lengthening is mainly metrical, see Sievers (1893a: §77), the change is one which would be predicted on phonological grounds. Orthographic evidence for the change comes from EpGl 49 *steeli* ‘steel’, ErfGl 333 *ungizeem* (= *ungizeeni*) ‘unseen’, EpGl 712 *ōnettae* ‘he anticipated’ (?), see Pfeifer (1974: §60).

² It should be noted that for this process to occur it is essential that the words be originally disyllabic. Therefore in a case such as **þweaxl* > *þwēal* ‘washing’ it must be assumed either that the /l/ is syllabic or that there is an epenthetic vowel, see §§6.38–40. But this would follow from the normal phonotactics of OE, see §2.83.

³ For discussion of the relative chronology of compensatory lengthening and hiatus resolution, see further §5.130.

⁴ Since compensatory lengthening is a process dependent upon syllable phonotactics, it does not take place in unstressed syllables, which only require one mora in the rhyme, see §2.80. Hence *ne habban* > *nabban* ‘not have’, see §§5.152–3. Compare, however, *bēot* ‘boast’ < **bi-hat*, where the first syllable must have been stressed.

5.125 Compensatory lengthening occurs under four circumstances: the three different types of loss of /x/ discussed in §5.124 and in the case of loss of /j/ before a dental¹ consonant. Compensatory lengthening due to loss of intervocalic /x/ is by far the most frequent, and is dealt with below under hiatus, see §§5.131ff. The remainder are treated in §§5.126–8 respectively.

¹ The consonant is usually /θ/, /d/, or /n/, see §7.71 for details.

5.126 In all dialects whenever /x/ is lost between a vowel and a voiced consonant the vowel is lengthened in compensation. Almost all the certain examples are cited in §5.124, but additional examples probably include **yhmest* > *ȳmest* (< **uxumist* by iterative *i*-umlaut, see §5.76). For other possible examples see Campbell (1959: 241.1). Additional examples occur with compounds of *eoh* ‘horse’ and *pleoh* ‘danger’, hence *ēored* ‘troop’, *plēolic* ‘dangerous’.

5.127 When /x/ is lost between a voiced consonant and a vowel, then in all dialects the fluctuation between lengthened and unlengthened forms described in §5.124 occurs regularly, although it seems likely that the unlengthened forms were the more common. Typical examples occur in the inflected forms of words such as *feorh*, *wealh*, see §5.124, and all other short-stemmed nouns of the same structure, similarly verbs such as *fēolan* ‘adhere’ < **feolhan*, cf. WS *filhð* ‘he adheres’. Of special interest are various forms of *sweora* ‘neck’ < Gmc **swerho*, for the usual LWS form is *swura* which can only have a short, that is, unlengthened, vowel, see §5.184.^{1,2} The poetical form *firas* ‘men’ < **feorhas* would appear always to be long, but this could well be a poetic convention and need not be significant. In obscured compounds lengthening appears to be regular, hence *īfiġ* ‘ivy’ < **if-hieġ*, *ōnettān* ‘hurry’, *ōrettān* ‘fight’ < **an-*, **or-haitjan*. But if the

compound remains, then syllable boundaries conform to the morphology, and there is no lengthening, hence LawAf 1.22 *eofot* ‘crime’, and forms of *eofolsian* ‘blaspheme’ < **ef-hat*, **ef-halsian*.

¹ Also fairly common in LWS is *swýra* which is the normal development of the rival form **swíerhjo*, of ambiguous length (as is earlier and rarer *swěora*).

² Also note nom.sg.fem., acc.pl.neut. *þweoru* ‘crooked’, where *-u* may imply a short stem vowel, and forms such as Lk(WSCp) 9.41 *þwure* (cf. ChrodR 1.31 *þwur* nom.sg. (2×)) against LWS (not Ælfric, Wulfstan) *þweor* nom.sg. Lch *moru* ‘carrot’ is similar to *þweoru*, but the introduction of *-u* may have been too late to be significant. ÆCHom *þwyrrian* ‘be opposed’ inf. and other forms of the pres. clearly demonstrate a short vowel.

5.128 When, especially in WS, /j/ is lost before a dental consonant, then compensatory lengthening naturally occurs, thus *rēn* for original *reġn*. In EWS texts forms with /j/ are common, see Cosijn (1888a: §135), but in LWS forms without /j/ and so with lengthening greatly predominate, hence EWS *þeġn*, LWS *þēn* ‘thane’. Similarly in other dialects where loss of /j/ is comparatively rare, compensatory lengthening follows the loss when it does occur, for example, Nbr *onġǣn* ‘against’ beside more frequent *onġægn*.¹

¹ More detailed discussion of forms will be found in §7.71.

5.129 Given the phonological nature of compensatory lengthening, there is little scope for morphological reformation. Thus, for example, in the case of a verb such as *sēon* ‘see’, where the vowel or diphthong, see below §5.148 and n1, of the first syllable is long, contrasting with the short diphthong of *seah* ‘he saw’, analogical reformation would be most unlikely. The only possible instances of analogical change involve nouns such as *feorh* ‘life’ and others discussed in §§5.124, 127 where the short diphthong in inflected forms could be attributed to the uninflected nom.sg. But in the light of other forms such as *swura*, see §5.127, which is short despite the fact that /x/ is always lost, an analogical explanation, as in Girvan (1931: §113A), for *feores*, etc. is redundant, cf. Luick (1914–40: §250A1).

5.130 With respect to chronology the same arguments hold as in §5.129. That is to say, compensatory lengthening is purely automatic and therefore takes place whenever the opportunity arises.¹ Thus compensatory lengthening takes place at exactly the same time as loss of /x/ or /j/. For details of these changes see §§7.50–1, 71 and also, in the case of loss of /x/, §5.102. There is considerable variety of opinion amongst scholars about the relative chronology of hiatus resolution, see §§5.131ff., and compensatory lengthening. Luick (1914–40: §250) generally sees the lengthening, which he explains as due to the necessity ‘die ursprüngliche Gesamtquantität der Silbe bezw.

des Sprechaktes zu bewahren', cf. §5.124, as being occasioned by the loss of /x/ and therefore earlier than resolution of the hiatus, but somewhat irrationally seems to suggest (§242) that when resolution of hiatus results in a diphthong, lengthening only takes place when the diphthong is formed. Both Campbell (1959: §234) and Brunner (1965: §127) claim that resolution of hiatus precedes compensatory lengthening, but that it itself involves lengthening; therefore the processes described above, they claim, only take place if the first vowel or diphthong has not already been lengthened by hiatus resolution.² This is unnecessarily complex and further denies that compensatory lengthening is a process which simply makes syllables conform to the normal phonotactics of the language. Similar confusion seems to appear in Bülbring (1902: §§217, 528), J. Wright and Wright (1925: §§139–49), and Girvan (1931: §§110–13).

¹ See Colman (1985: 20), also Chene and Anderson (1979).

² Brunner (1965: §218.2) even seems to suggest that loss of /x/ is later than compensatory lengthening, which is scarcely credible.

XIII Hiatus

(a) *Stressed vowel + unstressed vowel*

5.131 At about the time of the earliest texts, see §§5.133, 149, in the vast majority of cases where a stressed vowel or diphthong was immediately followed by an unstressed syllabic vowel, so that they stood together in hiatus, the hiatus was resolved, either by loss of the unstressed vowel or by diphthongization, in which case the second vowel became nonsyllabic. In every instance, by compensatory lengthening the stressed vowel or diphthong would be already long, since it occurred finally in a syllable. Such hiatus could arise for three reasons: (1) the hiatus may be original in Gmc but have remained unresolved when a similar change took place in WGmc, see §3.19; (2) the hiatus may be due to loss of intervocalic /j/ and /w/, see again §3.19; (3) the hiatus may be due to lenition and loss of intervocalic /x/, see §7.45. These three sources are listed in chronological order, and it is important to note that the last of them, loss of /x/, is crucial to the dating of the present changes, see §§5.132–3, 149. It should also be noted that by far the greatest number of cases of hiatus are due to this third source, and examples of hiatus due to either of the other two sources are few in comparison. The hiatus sequences, whether original or due to the loss of an intervocalic consonant, are of two principal types: (1) long vowel or diphthong + front vowel; (2) long vowel or diphthong + back vowel.¹ Examples of type (1) are: **dē-ist* 'thou dost', **scō-es* 'shoe' gen.sg., and in all dialects for all cases of type (1), but see further below for a possible

exception, the unstressed vowel is normally lost, hence *dēst*; *scōs*. Type (2) must be further subdivided into: (2a) front vowel + back vowel; (2b) back vowel + back vowel; (2c) diphthong + back vowel. Examples of each are: **bī-o* > *bēo* 'I am'; **dō-an* > *dōn* 'do'; **ēa-am* > *ēam* 'uncle'. Type (2) words show considerable variation, for example, both *dōn* and *dōan* are found. The interpretation of spellings involving this variable development in hiatus of unstressed back vowels is difficult and is discussed separately below, see §5.147. Nevertheless it is clear that the most frequent position in OE is that hiatus sequences become no longer tolerated and therefore an unstressed vowel is lost when it immediately follows a long stressed vowel or diphthong, with the vowel loss being most regular if the unstressed vowel is front, but subject to variation if the unstressed vowel is back. A further complication arises in the case of **ī+e* sequences, such as **sī-e* 'be' subj., for then the unstressed vowel appears always to remain in all dialects. These sequences are discussed separately below, see §5.146, whilst loss of an unstressed vowel is discussed in §§5.132–4 and loss of an unstressed back vowel in §§5.135ff. For all cases except **ī+e*, however, we can give the following general approximation:

$$\left[\begin{array}{c} \text{V} \\ \text{-stress} \\ \text{(-back)} \end{array} \right] \Rightarrow \emptyset / \left[\begin{array}{c} \text{V} \\ \text{+stress} \end{array} \right] \text{---}$$

¹ Many writers appear to suggest that the crucial factor in determining the nature of hiatus resolution is the stressed vowel or diphthong. This is implied, for example, in the presentations in Girvan (1931: §§108–12), Campbell (1959: §§234–8), and Brunner (1965: §§127–35). But it seems clear that it is the nature of the unstressed vowel which is crucial. For this reason it might be preferable to treat hiatus resolution in Chapter 6, but the question is moot and the traditional placement under development of stressed vowels is followed here for ease of comparison. For ease of comparison also, hiatus of unstressed vowel + stressed vowel is discussed in §§5.150ff.

5.132 In all dialects by the time of the written texts whenever the hiatus sequence vowel + front vowel occurred the hiatus was resolved by loss of the unstressed back vowel. By this time the only unstressed front vowels were *i* and *e*, see §§6.46, 48–9, and they were equally affected by the change. Since, see §5.131, the majority of instances of hiatus are caused by loss of intervocalic /x/, which would earlier have caused breaking of front vowels, there are rather few cases of front vowel + front vowel hiatus in WS, where diphthong + front vowel occurs instead. But in Angl smoothing intervenes to monophthongize such diphthongs, so that at the stage of hiatus resolution there are contrasts such as **feoxes* > WS **fēo-es*, Angl **fēxes* (smoothing) > **fē-es*. Typical examples of loss of an unstressed vowel in hiatus are as follows: Angl **sī-ið* > *sīð* 'he sees', **wri-ið* > *wrið* 'he covers',

and similarly other contracted verbs; Angl **hē-ira*, **hē-ist* > *hēra*, *hēst* ‘higher, highest’, cf. *hēh* ‘high’, Ps(A) **slē-is* > *slēs* ‘thou strikest’, cf. usual Angl *slāes* < **slā-is*;¹ **gā-ist*, **gā-ið* > *gāest*, *gāð* ‘thou goest, he goes’;² **cū-e*, *cū-es* > *cū*, *cūs* ‘cow’ gen.sg., **gēbū-en* > *gēbūn* ‘dwell’ pa.part.; **scō-es* > *scōs* ‘shoe’ gen.sg., **fō-e* > *fō* ‘take’ pres.subj.sg., similarly forms of *hōn* ‘hang’; **fā-e* > *fā* ‘hostile’ var.infls., similarly many other adjectives, **dā-e* > *dā* ‘doe’ nom.sg. and other similar wk.fem. nouns; and with first vowel /y:/ due to *i*-umlaut, **drȳ-i* > *drȳ* ‘magician’, **þȳ-ið* > *þȳð* ‘he presses’, similarly *tȳð* ‘he instructs’.³

¹ Most scholars explain Ps(A) *slēs* as due to *i*-umlaut, with the other Angl forms showing normal Angl levelling of umlaut. But such levelling is normal in Ps(A) also, and therefore an unumlauted form seems improbable. Alternatively we could suppose that smoothing gives **slæxis* with umlaut levelled away and that loss of /x/ with compensatory lengthening is sufficiently early to cause /æ:/ to raise to /e:/ in line with the smoothing of /æa/, see §5.99. This has the advantage of explaining Ps(A) *slē* pr.subj., which would otherwise show a remarkable analogical extension of *i*-umlaut, but it does not explain why the phenomenon is restricted to Ps(A) and is not general Angl.

² In WS loss of /x/ is later than syncope of unstressed vowels in the 2nd, 3rd sg.pr.ind. of strong verbs, and therefore hiatus of this type can only occur there in WS if it arises without loss of intervening consonant, see further §5.134.

³ Since *þȳð*, *tȳð* are weak verbs the loss of /x/ is not preceded by syncope, cf. n2 above.

5.133 Notwithstanding the above, there a number of examples where the unstressed vowel remains. Several occur in the early Merc glossaries, where they may indicate that resolution of the hiatus had not taken place at the time of composition of the earliest mss., perhaps confirmed by EpGl 785, CorpGl 1582 *faehit* ‘he paints’ and other examples where intervocalic /x/ has not been lost. Examples from these texts are: ErfGl 384, CorpGl 800 *sūid* ‘he sieves’,¹ ErfGl 899, CorpGl 1910 *strēiðæ*, *strēide* ‘he strewed’,² EpGl 870 (also forms in ErfGl, CorpGl) *fram adōendre* ‘take away’ pa.part., ErfGl 3, CorpGl 207 *thōae* ‘clay’, cf. EpGl 3 *thōhæ*.³ Beo 2436 *strēd*, cf. *strēide* metrically requires a disyllabic form, but this could be a function of slow speech rather than an archaism. More significant than the above are instances in other and later Angl texts where a disyllabic form appears to remain. The most frequent examples are amongst the contracted verbs *fēon* ‘rejoice’, *flēon* ‘flee’, *fōn* ‘take’, *hōn* ‘hang’, *sēon* ‘see’, *slēan* ‘slay’, *tēon* ‘draw’, *þēon* ‘thrive’, where the pr.subj. and 2nd, 3rd sg.pr.ind. should show contraction. But the following uncontracted forms are found: pr.subj. sg. Ps(A) *gēfēe*, Li, DurRitGl *sū*, DurRitGl *gēðū*, 2sg.pr.ind. Li *fōæs*, *fōeð* (etc.), Ru1 *sēes*, Li *sūs*, DurRitGl *sūst*, 3sg.pr.ind. Li *flūð*, *sūð*, DurRitGl *flēeð*, infl.inf. Li *fōenne*, Ru1 *sēenne*, pr.part. Ru1 *sēende*, Li *fōende*, *hōende*, *sēende*, *sēande*, *þūende*, DurRitGl *flēende*.⁴ All these forms exist alongside a majority of forms where the second vowel has been lost, but nevertheless

they suggest that in Angl at least the second vowel could remain if protected by inflexional juncture, see further §5.147. Outside the contracted verbs such forms are rare, but LkGl(Li) 15.12 *fāes* ‘money’ gen.sg. is a clear example.

¹ As with many of the other forms cited below, *sīd* is ambiguous, since ⟨ii⟩ could indicate the long vowel /i:/ rather than a disyllabic sequence.

² Unless the form is *streide* with a short vowel, a weak preterite of *streġdan*, as suggested by Pheifer (1974: §59.2n1). This then might be an example of second fronting.

³ Pheifer (1974: §59.5) suggests that in EpGl, ErfGl uncontracted forms are most common when the first vowel was rounded, and hence that hiatus persisted longer in these circumstances. But the evidence is meagre and it is doubtful if such an interpretation can be put upon it.

⁴ For some other more doubtful forms see the full list in Brunner (1965: §374).

5.134 Just as instances of front vowel + front vowel are most frequent in Angl, so instances of diphthong + front vowel are most frequent in S dialects where smoothing does not intervene. But as in the cases cited under §5.133, in the sequence diphthong + front vowel the hiatus is resolved by loss of the unstressed front vowel. Typical examples are: **ġefeaxæ* > **ġefēa-e* > *ġefēa* ‘joy’,¹ and similarly **sēo-e* > *sēo* ‘pupil (of eye)’, together with a great many examples from the inflected forms of nouns and adjectives. Thus *feoh* ‘money’ has gen.sg. *fēos* < **fēo-es*, and *hēah* ‘high’ has gen.sg.masc. *hēas*. Other forms from similar nouns and adjectives are cited in Campbell (1959: §235.2). Since in WS syncope of unstressed vowels in 2,3sg.pr.ind. of strong verbs occurred before loss of /x/, the examples of such forms cited under §5.133 from contracted verbs in Angl are not paralleled in WS, for example, WS **siexið* > *sibð* ‘he sees’. But other inflections of these verbs show the expected vowel loss, such as *sēo* ‘I see’, *sēonde* ‘seeing’. Similar forms are found in Kt, such as OccGl 49.1048 *flīo* ‘he may flee’, 724 *slēande* ‘slaying’.

¹ Ps(A) *ġefēa*, *ġefīa* is probably from **ġefexo* by §§5.137, 139, whilst Nbr *ġefēa* is ambiguous and may be from either **ġefexo*, cf. OHG *gefeho*, or, as in WS, **gefexo*.

5.135 When a front vowel was immediately followed by a back vowel, then in all dialects the hiatus was normally¹ resolved by diphthongization, with the unstressed vowel becoming the second element of a long diphthong. In principle any front vowel, including /y:/ as the product of *i*-umlaut, could be followed by any unstressed back vowel, that is, *u/o* or *a*, but there were significant dialectal differences in distribution. Where the first vowel was /i:/ or /y:/ then hiatus occurred in all dialects, but if the first vowel was either /e:/ or /æ:/ the monophthong was always due to smoothing before /x/ and therefore hiatus sequences were restricted to Angl.

See further the discussion in §5.147 below. Sievers (1900: 45–60) gives a concise overview of the phenomenon in the principal EWS and Angl texts.

5.136 When the hiatus sequences **ī-o*, **ī-a* occurred in WS, then diphthongization gives in both cases the diphthong *īo*, which later develops as *ēo*, see §§5.155–62.¹ The best examples of this are found in the conjugation of *bēon* ‘be’, where, for instance, **bī-u* > **bī-o* > **bīo*² > *bēo* ‘I am’, **bī-að* > *bīoð* > *bēoð*. Similarly WS has *bēo* ‘bee’.³ Excellent examples of the change and the merger of the two hiatus sequences to the diphthong *ēo* in WS are found in the conjugation of the weak class 2 verbs *fīogan* ‘hate’, *frēogan* ‘free’. Hence are found *fēoð* ‘he hates’ < **fī-að* and *fēode* ‘he hated’ < **fī-ode*.

¹ In Kt OccGl 49 has *bīoð* 10× against *bēoð* 1×.

² This form is not attested in EWS but may be safely inferred.

³ From inflected forms. The nom.sg. should be **bīe* < **bī-e* < **bī-æ*, cf. PsGl(E) *biebrēd* ‘bee-bread’.

5.137 In so far as the development of diphthongs in Merc is parallel to that in WS, so the resolution of hiatus is parallel also. Therefore **ī-o* > *ēo*, although ⟨io⟩ spellings are also found. However, in Ps(A) especially, see §5.45, ⟨ea⟩ spellings sometimes occur where ⟨eo⟩ would be expected, and more rarely the diphthong /æa/ is sometimes spelled ⟨eo⟩. Whatever the precise significance of this, the consequence in the present circumstances is that the hiatus sequence **ī-a* normally remains distinct from the sequence **ī-o*, although the first vowel is lowered to /e/ as in the case of **ī-o*. We therefore find **ī-a* > *ēa* (= /ea/, not /æa/). All four graphic combinations are, however, substitutable for one another, because of the lateness of the shift *īo* > *ēo* and the changes discussed in §5.45. For the verb ‘to be’ the normal spelling throughout Ps(A) is ⟨io⟩, hence not only *bīom* ‘I am’ but also *bīoð* ‘they are’. Forms with ⟨ia⟩ are relatively infrequent, for example, *bīað* 3×, as are forms with the first graph ⟨e⟩, such as Ps(A) 118.15, 142.7 *bēom*, note also 12.5 *bēam*. The same text distinguishes regularly between **fīað* ‘he hates’ and *fīode*, *fēode* ‘he hated’, but there is considerable confusion of forms of *frēogan*. The early Merc glossaries show both ⟨io⟩ and ⟨ia⟩ spellings for **ī-o* in EpGl 20, CorpGl 181 *bīo* ‘bee’, ErfGl 299, CorpGl 602 *scīa* ‘shin’, but ⟨a⟩ for **ī-a* in EpGl, ErfGl 158, CropGl 328 *cīan* ‘gills’, and EpGl 666a *fīat*, ErfGl *fīad* ‘he loves(?)’. In Ru1 ⟨eo⟩ spellings greatly predominate over all other forms, hence both *bēom* ‘I am’ and *bēoð* ‘they are’ are normal. All the forms cited above are the result of early hiatus sequences, but naturally in Merc hiatus of this type could also arise through smoothing and subsequent loss of /x/. The development of these later sequences parallels that described above, and so are found Ps(A) 103.9 *oferwrēan* ‘cover’ inf. (< **-wrīxan*), MtGl(Ru) 16.17 *omwrēoð* ‘reveal’

pl.pr.ind. EpGl 97 *gitiungi* ‘preparation’ shows early *iū* for *iō*, cf. ErfGl *getiōng*, EpGl, ErfGl 12 *flīo* ‘flea’.

5.138 In NNbr (Li, DurRitGl), since *iō* and *ēo* are normally kept distinct, see §5.159, but the second element is normally lowered, see §5.44(2), one would expect the sequences **i-o* and **i-a* both to develop to *iā*. Thus we find CædH 8 *tīade* ‘he arranged’, Li *-wriād* ‘wrap’ pr.ind.pl., *tuiade*, *tuiaton* ‘doubt’ pa.ind., all with loss of intervocalic /x/. In the case of *bīon*, *bēon* ‘be’, however, ⟨eo⟩ spellings tend to predominate. Thus Li has *bēom* ‘I am’ 13×, *bīom* 7×, *bīum* 1×. The only relevant form of the pl.ind. is MtGl(Li) 26.2 *bīađ*. In SNbr the second element of diphthongs is normally rounded and therefore we would expect ⟨io⟩ spellings everywhere. In fact Ru2 tends to preserve the original elements well and thus has *twīas*, *twīade* ‘doubt’ 2sg.pr.ind., pa.ind.sg. alongside *twīodun* pa.ind.pl. Relevant forms of the verb ‘to be’ are *bīom* ‘I am’ and *bīađ* ‘they are’.

5.139 The sequences **ē-o*, **ē-a* only occur in Angl where smoothing has operated. In line with the developments outlined above under §§5.137–8, the expected results in Merc would be *ēo*, with some forms having *ēa*, and inverted spellings ⟨io, ia⟩ due to the merger of *iō* and *ēo*. Thus in Ps(A) we find *gesēan*, *gesīan* ‘see’ inf., *gesēađ*, *gesīađ* pl.ind., also *gefīađ* ‘rejoice’ pl.ind., all with originally unstressed /a/, and *gesīo* ‘I see’, *gefīo* ‘I rejoice’, with originally unstressed /o/. Forms such as *gesīođ*, *gefīođ* co-exist only rarely. Other forms in Ps(A) also normally preserve the original sequence, such as *sēan*, *sīan* ‘pupil (of eye)’ pl., *hwēol*, *hwīol* ‘wheel’, but in the case of *flēon* ‘flee’ ⟨eo⟩ spellings are found throughout, hence not only *flēom* ‘I flee’ but also *flēođ* ‘they flee’. In Ru1, however, the normal result is almost always *ēo*, as in *gesēođ* ‘they see’ alongside very occasional *gesēap*.

5.140 In Nbr the normal development of both **ē-o* and **ē-a* is to *ēo*, *ēa*, following §5.44. Thus we find in NNbr forms such as Li *suēor* ‘father-in-law’. Despite Fücksel (1901: §22), Campbell (1959: §238), it seems not to be the case that amongst contracted verbs ⟨ea⟩ spellings predominate, for in Li we find only *gesēom* for 1sg.pr.ind.¹ and other forms with ⟨ea⟩ are predictable, such as *gesēađ* ‘they see’. In SNbr, on the other hand, ⟨ea⟩ spellings do predominate in these verbs to a greater extent than would be expected, the only form in Ru2 with ⟨o⟩ being *gisīom* (3×).

¹ JnGl(Li) 16.22 has *gesīum*, DurRitGl 1 23.3 *sīum* ‘I see’, which help to confirm the validity of the ⟨eo⟩ spellings. JnGl 9.25 *geseium* is merely a confused spelling.

5.141 In all Angl dialects where the original hiatus sequence was **ā̄* + back vowel, diphthongization to *ēa* occurred. In the earliest texts, however,

there are examples of ⟨eo⟩ spellings, such as EpGl, ErfGl, CorpGl *ēorisc* ‘water-rush’, which doubtless show no more than an earlier stage of the eventual /æa/ diphthong.¹ The almost invariable ⟨ea⟩ spellings here are best interpreted as representations of /æa/, to be distinguished from the spellings cited above §§5.137, 139–40. Typical examples of the diphthongization include: Li, Ru2, Ps(A) *ēa(-)* ‘water’, Li, DurRitGl, Ps(A) *tēar* ‘tear (of eye)’, Ps(A) *hēa, hēan, bēam* ‘high’ var.infl., in Ps(A) various forms of *slēan* ‘slay’, *ðwēan* ‘wash’, and in all Angl dialects forms of *smēagan* ‘consider’, *ðrēagan* ‘punish’.

¹ On the other hand Ps(A) 96.1 *ēolond* ‘island’ alongside 71.10 *ēalondes* is best explained under §5.45. Similarly Name 1.2.3 (Li) *ēolonde, -ēolond-* should be regarded as NNbr confusion, but see §5.44.2 and n7.

5.142 In addition to those above, hiatus sequences of /y:/ + back vowel also occurred. Such sequences would arise when the original sequence was */uixi/ + back vowel, for after the operation of *i*-umlaut the /i/ would be syncopated, see §6.19, and then intervocalic /x/ would be lost. Thus we have **tūxian* > **tȳxian* > **tȳxan* > **tȳ-an*. In all such cases the hiatus is resolved by diphthongization with the first element of the diphthong being unrounded to /i:/, thus giving /io/, /ia/ according to the value of the unstressed vowel. These merge with the other instances of these diphthongs and therefore follow the pattern of development described in §5.136. Forms of this type are found only in WS and hence show the diphthong /eo/, as in **tȳ-an* > *tēon* ‘instruct’, and similarly forms of *hēon* ‘press’.¹ Other examples are *rēo* ‘blanket’, cf. EpGl 1020 *rȳae*, CorpGl *rȳe*, retaining the hiatus sequence, and probably *cīo, cēo* ‘crow’, cf. ErfGl 240 *cīae*, presumably a diphthong of some kind, EpGl 240 *chȳae* for **cȳhae*.

¹ Alongside which occur *tȳn, hȳn*, analogical extensions from *tȳð, hȳð*, see §5.132.

5.143 When the sequence consisted of back vowel + back vowel, then the resolution of the hiatus apparently operated differently. In WS the usual development was that the unstressed vowel was lost. Therefore we find the contracted strong class VII verbs *fōn* ‘take’, *hōn* ‘hang’ < **fōxan, *hōxan*, together with the anomalous verbs *dōn* ‘do’, *gān* ‘go’. Similarly the inflected forms of a great many nouns and adjectives, such as *scōh* ‘shoe’, pl. *scōs, fāh* ‘hostile’, dat.pl. *fām*, show loss of unstressed vowel, cf. §5.134.¹ But if the hiatus sequence is **ū-a* then that always remains, for example, *būan, būað* ‘build, they build’, *scūa, scūan* ‘shadow(s)’.²

¹ Thus Phoen 276 *clām* ‘claw’ dat.pl. against usual *clāwum* with /w/ analogically restored. So Campbell (1959: §236.2), a view which Brunner (1965: §128A1) describes as ‘nicht nachweisbar’.

² But note that the regular dat.pl. of *cū* 'cow' is *cūum*. I can find no trace of ?† *cūm* cited by Campbell (1959: §236.1).

5.144 In the Angl dialects there is much more variability. On the one hand there are many forms which show loss of the unstressed vowel, but in some varieties forms where the unstressed vowel is retained outnumber those in which it is lost. In general, the more northerly the dialect the more likely it is that the unstressed vowel will be retained. Thus Ps(A) regularly has *fōn* inf., *fō* 1sg.pr.ind. alongside 115.13 *onfōu* 'I receive', but Li always has *fōa*, *hōa* inf. and similarly throughout the inflexions. For *dōn* 'give', in Ps(A) *dōn* is more frequent than *dōan*, but pl.ind. is always *dōð*, against imp.sg. *dōa* more frequently than *dō*.¹ Ru1 has inf. *dōan*, *dōa* but pl.ind. *dōap*, *dōp*. In all Nbr texts the hiatus usually remains unresolved and instances of the loss of the unstressed vowel are rare and exceptional, see Brunner (1965: §429). For *gān* 'go' Merc texts regularly lose the unstressed vowel,² but in Nbr the most frequent spellings are of the form *gāa* alongside less frequent *gā*, and it is most probable that such spellings reflect a disyllabic form. In Nbr and Ru1, where restoration of *a* was earlier than breaking, see §5.38, the inf. of *slēan* 'slay' should be *slā(n)*, and in Nbr texts both contracted forms, such as *slā*, and uncontracted forms, such as *slāa*, can be found.³ Similar failures to contract can be found among nouns and adjectives, early examples being: EpGl, ErfGl 106, CorpGl 156 *-lōum* 'strap' dat.pl., also EpGl, CorpGl *-lōan* pl., ErfGl 773, CorpGl 1486 *crōus* (?for *crōas*, see Pheifer, 1974: 111) 'vine-shoots'. Typical later examples are Li *scōeas*, Ru2 *scōum* 'shoe' acc., dat.pl.

¹ Also occurring (7×) is *dōo*, which may be a variant of *dōa* rather than an indicator of vowel length.

² Ps(A) frequently has *gāa* 'I go', a form not easily explained, but which may represent a disyllabic form (< **gāu* ?), cf. Brunner (1965: §430A3).

³ Instances of other verbs of the same type, such as *flēan* 'flay', *lēan* 'blame', *ðwēan* 'wash', are too infrequent to allow any certain conclusions, although contracted forms seem to predominate.

5.145 The hiatus sequence of diphthong + back vowel appears to run exactly parallel to that of diphthong + front vowel, see §5.134, for not only is it most frequent in those S. dialects where smoothing does not intervene but also the hiatus appears to be resolved by loss of the unstressed vowel. Typical examples, therefore, include *gefēan* 'joys' < **gefēa-an*, cf. *gefēa* 'joy', *hēam* 'high' dat. and other forms similar to those cited in §5.134.¹ Again the contracted verbs show many examples of the shift, for example, class I *wrēon* 'cover', class II *flēon* 'flee', class V *sēon* 'see', class VI *slēan* 'slay'. Class 2 weak verbs, such as *twēogan* 'doubt', show contraction in 3sg.pr.ind., thus *twēoð*. There are also many other examples both with

leo/ and */æa/*, including for the former *sēo* ‘pupil (of eye)’, *hwēol* ‘wheel’, *swēor* ‘father-in-law’, and, from earlier **īo*, *twēo* ‘doubt’; for the latter *ēa* ‘water’, *ēam* ‘uncle’, *ēar* ‘ear (of corn)’. With all these forms the Angl forms cited in §5.139–41 may be usefully compared.

¹ Additionally WS has some examples where the first element was originally the diphthong **īe*, for example, CP *ætiede* (2x) alongside *ætiewde* with */w/* analogically restored, EWS *ie* ‘water’ gen.dat.sg., cf. LWS *ēa* with the form of the nom.sg.

5.146 By the provisions of §5.132 the hiatus sequence **ī-e* should have been resolved by loss of the unstressed vowel. The most common examples of this sequence involve the subj. of *bēon*, namely **sī-e*, the 3rd pers.pron. **hī-e* nom.acc.pl., also fem.acc.sg., WS **þrī-e* ‘three’, and Nbr **betwixen* > **betwī-en* ‘between’. In EWS there is variation between forms with ⟨ie⟩ and forms with only ⟨i⟩, such as *hīe*, *hī*, although in Oros ⟨i⟩ spellings are very infrequent, see Cosijn (1888a: §69), and in Chron (A) the early parts show that there too ⟨ie⟩ predominates overwhelmingly, see Sprockel (1965: §10.1). In LWS, as exemplified by *ÆCHom*, ⟨y⟩ spellings equally predominate, with only a minority of ⟨i⟩ spellings and virtually no ⟨ie⟩ spellings.¹ The most obvious interpretation of these facts is that the hiatus sequence was resolved in WS by diphthongization to the sound represented initially by ⟨ie⟩, thus merging with, and undergoing the same developments as, other instances of that diphthong. The variation between ⟨i⟩ and ⟨ie⟩ in EWS and the dominance of ⟨y⟩ in LWS would be explained on the same grounds here as for any other instance of **īe*.² In Merc the normal forms of the pronoun are Ps(A) *hīe*, Ru1 *hīæ*, and of the verb *sīe*, the latter also Nbr³ whilst Nbr usually has *hīæ*, *hīa* for the pronoun and *bitwīen* ‘between’. It is usually argued that these forms must be bisyllabic, on the grounds that ⟨ie⟩ does not represent a diphthong outside EWS, see §2.37, and that BDS 2 *sīe* must be disyllabic for metrical reasons. Neither of these arguments is wholly convincing, but there is other evidence to support the traditional position. Thus we find at Ps(A) 26.4 *sīem* ‘I may be’, an analogical formation which could not exist without being bisyllabic, cf. forms such as *bēom* ‘I am’, see also Hogg (1980). Furthermore there are many other forms parallel to those cited in §5.134 where *e* appears to be protected by an inflexional juncture, such as Ps(A) *sīende* ‘seeing’, *fīede* ‘he hated’,⁴ 111.8 *gēsīeð*, JnGl(Ru2) 12.40 *gīsīeð* ‘he sees’, JnGl(Li) 3.20 *gēfīeð* ‘he hates’.⁵

¹ One exception is *ÆCHom* I 11 166.13 *hīe*. There are, of course, many such spellings in other late texts which do not conform to the norms of the LWS *Schriftsprache*.

² For other explanations see §5.147.

³ Alongside *sē(e)*, possibly an originally weak form, see Brunner (1965: §47A1).

⁴ Alongside expected *fīode*. Similar examples occur in Nbr, such as *getwiedon* ‘they doubted’. Presumably such examples show confusion of an unstressed vowel, and are unlikely in their context to indicate diphthongs.

⁵ Perhaps also to be included here are Ps(A) 8.4 *ġesīe* 'I shall see', 91.5 *ġefīe* 'I shall rejoice', instead of usual *ġesēo*, *ġefēo*, but the final *-e* is not easily explained, since *-e* is not normally found for 1sg.pr.ind. in this text.

5.147 The analysis presented in the preceding sections is far from certainly correct. Essentially it is as follows. Firstly, whenever the unstressed vowel in hiatus is front, then the hiatus is resolved by loss of that vowel (§5.132), although in Angl dialects that vowel could be protected by inflexional juncture (§5.133). The only exception to the above concerns **ī-e*, where diphthongization occurs in WS but not in Angl (§5.146). Secondly, when the original sequence was front vowel + back vowel, then in all dialects diphthongization occurred (§§5.135–42). Thirdly, if the original sequence was back vowel + back vowel, then in WS the unstressed vowel was lost except if the sequence was **ū-a*, when it was retained (§5.143), whilst in Angl there was much variation (§5.144). Finally, if the original sequence was diphthong + vowel, typically occurring in S. dialects only, then the unstressed vowel was lost (§§5.134, 145). In effect what is being suggested is that any hiatus sequence which can be resolved by diphthongization into the normal structure for OE diphthongs of front vowel + back vowel is so resolved, and in WS the diphthongization of **ī-e > īe* must be construed as a parallel process, see Campbell (1959: §234 and n2). Otherwise any unstressed vowel is lost in WS, with the anomalous exception of /a/ in **ū-a*, and in Angl loss of the vowel is variable. However, Quirk (1950, 1968b) and Colman (1985) have suggested that inflexional juncture played a rather more important role in the prevention of contraction or diphthongization than has normally been assumed. Quirk claims that forms such as Nbr *sīūð* 'he sees', Angl *sēende* 'seeing' (§5.134), Angl *dōa(n)* 'do', Nbr *sċōum* 'shoe' dat.pl. (§5.145) are the consequence of inflexional juncture permitting the hiatus to remain unresolved, cf. here PDE *sawing* against *loin*, *point* (Quirk, 1968b: 32). Furthermore, in the late OE text Hept(C) a number of spellings indicate that inflexional juncture could prevent resolution in WS also. Thus, aside from the usual spelling *bēoð* 'be' pl.pr.ind. there are forms such as Gen(C) 18.29 † *bīoð* pl.pr.ind., 9.7 † *bȳoð* imp.pl., 22.18 † *bȳoð* pl.pr.ind., 23.11 † *bȳo* sg.pr.subj., whilst for the development of the normal diphthong *leo*, alongside ⟨eo⟩ spellings occur forms such as Gen(C) 17.3 † *fūl* 'he fell', 23.6 † *lȳf* 'dear'. The monophthongal spellings do not occur with examples involving hiatus and the unusual digraph spellings occur only once with an original diphthong, namely Gen(C) 23.11 † *lȳof* for *lēof*. This implies that the hiatus sequences were left unresolved in inflexional juncture and it may even be the case that WS *dōn* is a conventionalized spelling which hides the possibility of a disyllabic form. To this we may add examples such as *slēan* which are inherently ambiguous, since it is improbable that a spelling **{slēaan}*, the only reasonable method

of indicating the presence of a hiatus sequence, could ever have achieved wide currency.¹ Colman (1985: 18–21) extends Quirk's arguments to ⟨ie⟩ spellings in forms such as *sīe*, but the difficulty here, which also faces many of Quirk's arguments, is that the later developments outlined above entail that, in WS at least, diphthongization normally did take place when that was available as a method for resolving hiatus, see, however, §§5.163ff². The evidence of the preceding sections makes it most likely that the principal factor in determining whether or not hiatus resolution took place was geographical – *contra* Bülbring (1902: §212) – with the more northerly dialects allowing most frequent retention of hiatus, and that morphological features such as inflexional juncture, although important, were secondary to the geographical ones.

¹ Both Quirk (1968b) and Coleman (1985) mention forms of the *slēan* type but do not point out the graphic difficulties. See, however, Stockwell and Barritt (1951: 16) for relevant comments on trigraphic combinations.

² Quirk (1968b: 33–4) cites much evidence from OE poetry to show that there contracted verbs must often be analysed as disyllabic, for example, *Rid* 41.7 *dōð* 'do', and points out that chronological explanations are scarcely available, see further Norman (1933: 6–7), Amos (1980: 40–63).

5.148 The major morphological factor influencing hiatus sequences is inflexional juncture, and that issue is dealt with in §5.147. The principal word categories affected are the contracted verbs, both strong and weak. Amongst strong verbs contracted verbs are found in classes I, II, V, VI and VII, see Brunner (1965: §373), and such verbs are also found in both principal weak verb classes when the nom.sg. of the word ends in /x/, such as *scōh* 'shoe'.

5.149 The relative chronology of hiatus resolution cannot always be precisely determined. At best, as when the hiatus is created by loss of intervocalic /x/, as in **seoxan* > **sēo-an*, it naturally follows that resolution must be later than loss of /x/, as is further demonstrated by equivalent forms in Angl where smoothing has taken place: **seoxan* > **sexan* > **sē-an*. Since loss of intervocalic /x/ took place at about the time of the earliest texts, but after smoothing, see §§5.100(2), 102, and, for examples of intervocalic /x/ in early texts, §7.46 and forms such as EpGl *faehit* cited in §5.133, it follows that hiatus resolution cannot usually have occurred at a time earlier than the earliest texts. But if the hiatus is from an earlier source, as in *bēo* 'I am', see §5.131, then resolution of the hiatus could have been much earlier. It seems probable that the change was earlier than changes such as WS, Merc *īo* > *ēo*, since, see §§5.136–7, also 142, *īo* diphthongs caused by resolution participate in that change, and the same holds with reference to WS developments of **īe*, discussed in §5.146.

Disyllabic forms in poetry provide no evidence of date, see §5.147n2 and references.

(b) *Unstressed vowel + stressed vowel*

5.150 In addition to the above instances of hiatus between a stressed and an unstressed vowel, hiatus could also occur between an unstressed vowel and a stressed vowel. Such cases, are, however, less frequent, and appear to be restricted to the prefix *be* (< *bi-*) and the negative particle *ne* (< *ni-*). In both types the hiatus between the unstressed vowel and an immediately following stressed vowel is resolved by loss of the unstressed vowel, in other words a mirror image of the vowel loss occasioned by hiatus of a stressed vowel followed by an unstressed vowel, see §5.131. Thus we find typical examples such as *be-æftan* > *bæftan* ‘after’, *ne-is* > *nis* ‘isn’t’. The consequence of this is that the two types of loss as a result of hiatus can be approximately stated within one formulation by means of a mirror-image convention, see, for example, Lass (1984: 195), with the following result, cf. §5.131:^{1,2}

$$\left[\begin{array}{c} \text{V} \\ \text{--stress} \end{array} \right] \Rightarrow \emptyset / \left[\begin{array}{c} \text{V} \\ \text{--stress} \end{array} \right]$$

¹ See, however, the further comments in §5.153.

² Brunner (1965: §127A4) explicitly distinguishes between the present change, which he describes as elision, and the changes discussed in §§5.131–49, which he describes as contraction. His reasons are unclear to me. For an alternative interpretation see Luick (1914–40: §311A).

5.151 Examples involving the prefix *be-* include, as well as *bæftan*, *be-innan* > *binnan* ‘within’, *be-ufan* > *bufan* ‘above’, *be-utan* > *butan* ‘without’.¹ Resolved forms predominate over unresolved forms, of which the following are examples in the major texts: CP 153.18, 155.20 *beinnan*, CP (2×), Or (13×), Chron(A) (2×) *beæftan*, CP 409.25 *biæftan*. It is notable that *bæftan* is not found in the principal EWS texts, and that no unresolved forms of these words are found in the works of Ælfric or Wulfstan, see further §5.154.

¹ Not to be included here is LibScProlMt(Li) 1 *booflic*, presumably an error for *behōflīc* ‘hungry’, see Campbell (1959: §354n1). It is also difficult to see how *blinnan* ‘cease’ < **bi-linnan* can be included here.

5.152 The circumstances in which the element *ne* appears in hiatus may be morphosyntactically as well as phonologically controlled, for the hiatus only occurs as a result of procliticization of the particle. In general

procliticization takes place only with quantifying adverbs and pronouns, and with a restricted group of verbs. Where the following word is an adverb or pronoun, then, in addition to the possibly syntactic restriction to quantifier-type words, that word must also begin with a vowel, as in *nānig* ‘no one’ < **ne-ānig* < **ni-ānig* < **ni ānig*.¹ Where the following word is a verb, then only a very restricted set of verbs, all of high frequency, show the cliticization and subsequent hiatus resolution.² These verbs are listed below. Examples of adverbs and pronouns which typically show the above processes are: *nā*, *nō* ‘never’, *næfre* ‘never’, *nealles* ‘not at all’, *nāwiht* ‘not’, *nān* ‘no, none’, *nānig* ‘no, none’, *nāðor* ‘neither’, *nāwiht* ‘nothing’, see further Mitchell (1985: §§436–46, 1128). Amongst verbs the simplest examples are: *nis*, *nys* ‘isn’t’ < **ne-is*, and *nāhte* ‘hadn’t’ < **ne-āhte*. Nbr and Ru1 have *nam* ‘amn’t’ < **ne-am*,³ whilst Ps(A) has *neam* < **ne-eam*, also occurring at LkGl(Li) 18.11, but *neom* is not found in EWS and is extremely rare in LWS, for example, at ÆCHom I 8 126.8. Cliticization also occurs when a verb originally begins with either [h] or /w/, the initial consonant being lost. With loss of initial [h] we find all forms of *nabban* ‘haven’t’ < **ne-habban*. With loss of initial /w/ we find *næs* ‘wasn’t’, *nāt* ‘didn’t know’, *nolde* ‘wouldn’t’ and in Nbr *nelle*, *nellað* imp.sg.,pl. glossing Lat *noli(te)*. However, when the original sequence was **ni-wi*, then /w/ caused rounding at the time of its loss, giving *ny-*, and hence we find *nylle* ‘won’t’ < **ni-wille*, and similarly *nyllað* and negative forms of *witan* ‘know’ such as *nyton*, *nyte*, *nyste*. Such forms are mainly WS, Kt, and the Ps(A) dialect of Merc and are much less common in other Angl texts, although examples are found. In LWS forms of *nyllan* ‘won’t’ usually develop to *nel-*, thus ÆCHom has no examples of *nyle* or *nyllað*, and only one example of *nylle* (ÆCHom II 9 76.133). Forms with *-e-* are rare in EWS, but CP has *nellað* 3×, Or 2×, and CP has *nele* 2×, Or 1×. The explanation of the LWS development is uncertain.⁴

¹ Mitchell (1985: §243) quotes the rare John (WSCp) 1.21 *niċ* ‘not I’ < *ne iċ*. Although this is certainly the etymological origin, the translation could well be ‘no’, cf. the versions in both AV and NEB. Other instances of *niċ*, at John (WSCp) 18.17, ÆColl 110, MtGl(Ru1) 13.29, 25.9, clearly translate as ‘no’. Thus OE does not appear to provide instances of cliticization of *ne* to a personal pronoun, and *niċ* is best analysed as an ossified form to be added to the examples from OHG and OSax cited in Levin (1958: 492).

² Of course cliticization is only proved in cases where hiatus subsequently occurs and is resolved. Sequences such as *ne sċeal* ‘must not’ could well show proclisis, but there is no direct evidence to demonstrate this.

³ Ru1 also has *næm*. But the positive form is always *eam*, cf. Li *am*, and the monophthongization in Ru1 suggests a low stress form, see further §5.153.

⁴ Campbell (1959: §265) reasonably suggests it is a special low stress development. Brunner (1965: §428A2) suggests that the LWS forms show the vowel of the particle *ne* rather than of the verb root, but that is clearly implausible.

5.153 Although §5.152 would appear to suggest that vowel loss in hiatus of an unstressed vowel followed by a stressed vowel is controlled by nonphonological factors, this is probably somewhat misleading. The cases presented there are better explained by assuming that cliticization takes the form of the negative particle being attached to an element which has low phrasal stress, for quantifying adverbs and pronouns can often have such low stress, and it is probable, although not finally determinable, that the same would apply to the verbs to which the clitic can be attached, see Levin (1956: 37) and the comments in Mitchell (1985: §1131). Once cliticization occurred, then hiatus resolution could proceed freely. Clear evidence that low stress conditions prevailed comes from two sources: (1) the otherwise unusual loss of initial [h], /w/; (2) the failure of lengthening to occur in resolution of a hiatus sequence such as **ni-is*. Other evidence has been mentioned above, such as Ru1 *nam*, *næm* < **ne-eam*, see §5.152n3.

5.154 Chronologically perhaps the most that can be discerned is that hiatus resolution of these sequences was already possible by the time of the earliest texts, since examples are already frequent in EWS, see §5.151. But, as the discussion there shows, hiatus resolution is even more frequent in LWS, and the resolved form *bæftan*, frequent in LWS, is not found at all in EWS. Similar, but less important, is the occasional LWS occurrence of *neom*, not found in EWS. This suggests that the vowel loss discussed here became increasingly frequent during the period of the written texts, and perhaps commenced at much the same time as the processes discussed under §§5.131–49. The picture is, however, made more complex by the fact that cliticization of *ne* appears to have been subject to dialectal variation. Thus Levin (1958: 495) produces figures to show that in EWS ‘negative contraction’ occurs in *c.*97 per cent of examples, in Merc in *c.*69 per cent, and in Nbr in *c.*61 per cent. The reason for this is presumably the greater strength of junctural boundaries in the Angl dialects, see §5.147. Interestingly Levin’s figures for Ælfric and Wulfstan suggest that contraction takes place in about 99 per cent of cases in the former, and always in Wulfstan, see Mitchell’s (1985: §1130) comments on Levin (1958). These results confirm that this type of hiatus resolution became more frequent in later texts, at least in WS.

XIV Merger of /io/ and /eo/

5.155 From about the ninth century onwards, see §5.162, the long and short diphthongs /io, iö; eo, eö/ began to merge in most OE dialects. The merger is seen first in EWS, is most extensive in LWS, and is also well demonstrated in Merc, but scarcely at all in Nbr. The situation is somewhat

different in Kt, see §5.160. The result of the change is that where in EWS an apparent contrast can be seen between /io, iō/, as in *betwīox* ‘between’, *tiohhian* ‘consider’, and /eo, eō/, as in *cnēo* ‘knee’, *feoh* ‘cattle’, in LWS all such forms are regularly written with the digraph ⟨eo⟩, that is, *betwēoh*, *teohhian*, *cnēo*, *feoh*. Both these later spellings and the development of the diphthongs in ME to a mid front vowel (initially rounded, later unrounded) imply that the change involved a lowering of the first element of /io, iō/ so that those diphthongs merged with /eo, eō/, see, for example, d’Ardenne (1936: 192–3). Typical examples of the change are frequent and derive from all sources of /io, iō/. Thus from original /io/ we find *līode* > *lēode* ‘people’,¹ from /io/ by breaking *līoht* > *lēoht* ‘light’, by diphthongization in hiatus *bīo* > *bēo* ‘be’ subj.sg.; from /iō/ by breaking we find *liornian* > *leornian* ‘learn’,² by back umlaut *hiora* > *heora* ‘their’.³ For examples where original /eo, eō/ is spelled ⟨io⟩ see §§5.157ff. Since it is certainly the case that the second element of all these diphthongs had already lowered to /o/ by the time of the merger, see §§5.46, 6.58, the process is undoubtedly one by which the first element of the diphthong assimilated in height to the second element.⁴ More importantly, however, the change was one which involved complete phonemic merger, and the consequent reduction of the OE diphthongal phoneme system to /eo, eō/ and /æ, æa/ only. The change can be stated approximately as follows:

$$\left[\begin{array}{c} \text{V} \\ +\text{syll} \end{array} \right] \Rightarrow [-\text{high}] / \text{_____} \left[\begin{array}{c} \text{V} \\ -\text{syll} \\ -\text{high} \end{array} \right]$$

¹ For discussion of such forms, often said to have undergone ‘Half-umlaut’, see §5.84.

² As with *lēode*, etc., forms such as *leornian* may simply show failure of *i*-umlaut rather than merger of the diphthongs.

³ *Hiora* exists alongside *hiera*, *hira*, forms which show failure of back umlaut, see §5.104n8.

⁴ According to Cosijn (1888a: §38) this explanation is first due to Mahlow, but I can find no further details.

5.156 In EWS there is considerable variation between texts.¹ In CP (both C and H) original *īo* is spelled both ⟨io⟩ and ⟨eo⟩, the latter predominating but the former still quite frequent. Typical examples for *īo* < Gmc **iū* are, *biōdan*, *bēōdan* ‘command’, the former occurring 2× in CP(C), 4× in CP(H), the latter 13× in C, 17× in H, whilst *þīod* ‘people’ occurs 4× in H, 1× in C, against *þēod* 1× in C. The loan-word *dīōfol* ‘devil’ occurs as such 25× in H, 13× in C, and as *dēōfol* 3× in H, 5× in C. In examples where *īo* is due to contraction ⟨io⟩ sometimes predominates, thus CP(H) has 77× *hīo* pers.pron. against *hēo* 7×, but figures for *bīon* and *bēon* are roughly equal in the same ms. It is difficult to draw any conclusions from these figures.

Similar variations occur with *īo* from breaking, for example, *lēoht* predominates over *līoht*. Alongside such forms exist examples of *ēo* < Gmc **eu* or by diphthongization in hiatus or by compensatory lengthening of /*ēō*/ < */*e*/ by breaking. These are most usually spelled ⟨*eo*⟩ in CP, but there are examples of ⟨*io*⟩, such as CP(H) 347.24 *wildīorlic* ‘brutish’, CP(H) *bebīod(-)* (2×) ‘command’, and many forms developed from hiatus, such as *-sīon* perhaps more frequently than *-sēon* ‘see’, also *plīon* ‘risk’, *gefīonde*, *gefīoð* forms of ‘rejoice’, CP(C) (only) *fīos* (2×) ‘property’ gen.sg., *twīon* ‘doubt’ acc.sg. In Or generally ⟨*io*⟩ spellings are less frequent than in CP, but the following examples of ⟨*io*⟩ for original *īō* are found:² f59 *hiora* (107×, alongside *heora* 222×) pers.pron., *hīo* (41×, alongside *hēo* 41×) pers.pron., *sīo* (25×) dem., *dīofol* (12×, alongside *dēofol* 7×),³ *bīon* (3×) ‘be’, *brīo* (3×) ‘three’, *siolfre* (2×) ‘silver’, *siofope* (1×) ‘seventh’, ⟨*io*⟩ for original *ēō* is very uncommon, the only examples being *īower* (5×) ‘your’, *elbīod-* (2×) ‘exile’,⁴ and *dīor* (1×) ‘animal’.⁵ The most important feature of Chron(A) is that the annals from 893–5 of ‘Parker II’⁶ show *hiora* 8×, *sīo* 6×, but elsewhere in Parker I, II such forms are either rare (*sīo*) or non-existent (*hiora*), see further Bately (1980: xliii–xliv), Sprockel (1965: §1.3.4).

¹ The figures below for CP are taken from the relevant sections of Cosijn (1888a). Cosijn’s work is valuably supplemented on specific texts by Kim (1977) for CP(H), Bately (1980) for Or and parts of Chron(A), and Sprockel (1965) for Chron(A).

² The figures for *heora*, *hiora* are taken from MCOE, which is based on the edition of Sweet (1883). For the comparable figures in Bately’s edition see Bately (1980: xliii–xliv). The differences do not, however, lead to different conclusions.

³ In view of Nbr *dīofol* and the frequency of similar spellings in EWS, it is better to assume that this word is from Gmc **iu* than from **eu*, as assumed by Bately (1980: xliiii), see Campbell (1959: §492).

⁴ But this word could show *i*-umlaut of *ēo*, see §§5.155, 84.

⁵ Possibly to be included here is Or 126.6 *swiostor*, but cf. Campbell (1959: §210.2n3).

⁶ Parker II = the annals of Chron(A) 892–912, apparently the work of the scribe of the Lauderdale ms. of Or, see Bately (1980: xxxix), Horgan (1963).

5.157 In LWS earlier *īō* and *ēō* are both written ⟨*eo*⟩. Thus amongst the more common words I have found only the following examples of ⟨*io*⟩ in ÆCHom: I 220.8 *bīo* ‘be’ imp., I 172.8 *dīofles* ‘devil’ gen.sg., I 30.5, 160.13 *hīo* pers.pron., I 26.34 *hiora* ‘their’. In other late texts, such as some of VercHom, ⟨*io*⟩ spellings are less rare, but it remains clear that in Ælfrician texts ⟨*eo*⟩ spellings were completely dominant.

5.158 In the early Merc glossaries *īō* and *ēō* usually remain distinguished. Thus in EpGl, ErfGl the only examples of original **iu* written with ⟨*eo*⟩ are EpGl 620 *burglēod* ‘citizen’ and the doubtful ErfGl 229 *gelēod* ‘crowd’ (? see Pheiffer, 1974: 74), both of which may simply show failure of *i*-umlaut.

EpGl has 5 examples of ⟨io⟩ for **eu*, such as 817 *buturfliōgae* ‘butterfly’, paralleled 4× by ErfGl, see Pheiffer (1974: §41). In CorpGl the distinction between *īō* and *ēō* is reasonably well preserved, but note 225, 1976 *brīosa* ‘gadfly’, 1759 *cnīoholen* ‘knee-holm’, 1405 *cīopunge* ‘creeping’ dat.sg., 1125 *tīonan* ‘injuries’, 510, 1470 *gēstrīon* ‘property’, and especially the compound 1672 *brīostbiorg* ‘breastplate’, where the second element shows ⟨io⟩ for the breaking of **/e/*.¹ There are also doublets such as 923 *hlēor*, 86 *hlīor* ‘face’, 900 *gētrēuwade*, 857 *gētrīowad* ‘allied’, which imply that the distinction was nevertheless becoming blurred, see Kuhn (1939: 10) and references. CorpGl, unlike EpGl, ErfGl, see §5.104(2), has many examples of back umlaut, and about a quarter of such examples involving **/i/* are spelled ⟨eo⟩ (Kuhn, 1939: 10). Typical examples include 2053 *begeonan* ‘on the other side’, cf. EpGl 1041 *bigīnan*, 770 *seotol* (for *sweetol*) ‘evident’, CorpGl 5 *neopouard* ‘below’. In Ps(A) earlier *īō* and *ēō* can both be spelled ⟨io⟩ or ⟨eo⟩, thus both *nīowe* and *nēowe* ‘new’ and *līofa* and *lēofa* ‘dear’.² But ⟨eo⟩ spellings appear to predominate, especially before */r/*, see Sievers (1900: 36–9), also Zeuner (1881). The only examples of ⟨io⟩ for *eo* from breaking or back umlaut in Ps(A) are: 77.3 *fiolu* ‘many’, 77.26 *hiofene* ‘heaven’ dat.sg., and, perhaps, 32.13 *hievene* showing reduction of the second element. There are, however, frequent examples of ⟨eo⟩ for breaking and, especially, the back umlaut of **/i/*, such as *sceopu* ‘ships’, forms of *clīpian* ‘call’, such as *cleopiu*, where indeed ⟨io⟩ is not found. The ME evidence, for which see d’Ardenne (1936: 192–3), confirms the implication that here, as in WS, the diphthongs fell together in /*eo*, *eō*/. In Ru1 the predominance of ⟨eo⟩ spellings is greater still, although in cases of back umlaut of **/i/* except before */i/* ⟨io⟩ predominates in the ratio of 5:3 (Sievers, 1900: 36, after E. M. Brown, 1891). Before */r/*, as in Ps(A), ⟨eo⟩ spellings predominate, for example, *heora* 84× against *hiora* 5× (E. M. Brown, 1891: §33d). *Đīofes*, *đīofes* ‘thief’ shows ⟨io⟩ for original **ēō*.

¹ Note also Lit 5.1 *iordān* ‘earth’ (alongside *fīordān* ‘fourth’).

² For occasional ⟨ea⟩ spellings of these diphthongs see §5.45 and n3.

5.159 In all Nbr texts the distinction between *īō* and *ēō* is well preserved. Most exceptions are trivial, but some oddities are noteworthy. Thus Li has *frēond* ‘friend’ 13×, *frīond* 16×, and Ru2 has *frēond* 11×, *frīond* 9×, but both texts always have *fīond* ‘enemy’, see Sievers (1900: 52). The contrast between Li *sefo*, etc. ‘seven’ and Ru2 *siufu* arises because the former is from an uninflected, the latter from an inflected, form. For fuller details of the position in these texts see Sievers (1900: 26–35, 49–54).¹

¹ The regularity of *ēode* ‘he went’ implies a development from Gmc **eu*, as first noted by Sievers (1900: 52), see Luick (1914–40: §261A3 and references) and, for a summary of more recent studies, Bammesberger (1979a: 44).

5.160 In Kt the position was slightly different from that in the other dialects. In the ninth-century charters there are a good number of examples where the first element of $\check{e}o$ has been raised, typical examples of long diphthongs being: Ch 1195, 1197 *bebiade* ‘I command’, Ch 1204 *Čialulfe* personal name, Ch 1188, 332 *iow* ‘you’, Ch 1510 *liofast* ‘dearest’, Ch 1188 *-priost* ‘priest’, Ch 1188, 1482 *điow* ‘servant’; typical examples of short diphthongs are: Ch 1185 *agiaban* ‘give’, *fiah* ‘property’, Ch 1197 *hiabenlice* ‘heavenly’, Ch 1482, 1510 *siolf(-)* ‘self’, Ch 1197 *wiaralde* ‘world’, Ch 41 *wiorð* ‘property’.¹ There are also examples where ⟨eo⟩ (⟨ea⟩) is written for earlier *io*: Ch 1508 *awreotene* ‘written down’, Ch 1195 *weada* ‘wood’ gen.sg.² In the later OccGl 49 $\bar{i}o$ and $\bar{e}o$ seem to have merged as /io/, for whilst original $\bar{i}o$ is almost always so spelled, a rare exception being 349 *hrēosp* ‘it falls’, cf. 386 *ahrīosð*, original $\bar{e}o$ is frequently spelled ⟨io⟩, in the proportion 3:1 in favour of ⟨io⟩ according to the figures in Williams (1905: §15). In the case of short *io* and *eo* breaking of */e/ is most often spelled ⟨eo⟩ (⟨ea⟩) with only occasional ⟨io⟩ as in 1199 *ciorl* ‘man’, whilst the few examples of breaking of */i/ are spelled ⟨io⟩, such as 526 *stiorce* ‘calf’. The examples of back umlaut in the text strongly imply that the short diphthongs had merged as /eō/, since ⟨io⟩ for *eo* is rare, and ⟨io⟩ for *io* is absent, see Williams (1905: §§42, 44). This suggests that in Kt the tendency was for $\bar{i}o$ and $\bar{e}o$ to merge as /io/, but for *io* and *eo* to merge as /eō/, as confirmed by the developments in ME, see Jordan (1974: §85).

¹ For the ⟨ia, ea⟩ spellings see §5.43.

² Perhaps of special interest is Ch 1171 † *triow* ‘tree’, the original charter being dated 685x694. But the copy is a later one and therefore the spelling need only reflect the situation in tenth-century Kt.

5.161 Any morphological factors involved in this change would be expected to lead to levelling of forms. But the change itself, since it is a complete phonemic merger, would have exactly the same effect. Therefore there is no evidence of any analogical interference in the change.

5.162 The evidence of the EWS texts is that the merger of $\check{i}o$ and $\check{e}o$ was already well under way by the end of the ninth century, for, see §5.156, even in CP there is considerable confusion between ⟨io⟩ and ⟨eo⟩ spellings. This might imply that the merger had taken place in the ninth century and that the scribes of CP had some knowledge of the earlier distinction no longer present in their own speech or that of the dictators of the translation. The evidence of Or and also Chron(A) would suggest that by the early tenth century the two diphthongs had completely merged together as /eo, eō/, and it is certain that in the language of the best Ælfrician mss. there is virtually no sign of the earlier distinction, although it may well have persisted in some southern sub-dialects, see §5.157. The evidence from

Merc ties in with the above, for there are scarcely any signs of the incipient change in the earliest glossaries, slightly more in CorpGl, and the merger appears to have been fully under way in the dialect of Ps(A) and progressed almost to completion by the time of Ru1.¹ In Kt the ninth-century charters indicate that the changes had already started, even if they were to follow a rather different pattern. Only in Nbr is the merger delayed until after the end of the OE period. We may therefore conclude that the merger was essentially a ninth-century phenomenon, confined to the S and Midl, and perhaps, given the evidence of Kt and occasional examples in the early Merc glossaries, starting off in the east or south-east of the country.

¹ Flasdieck (1930) argues that in WMerc the change cannot have been earlier than 800.

XV West Saxon developments of high front vowels and diphthongs

(a) *The development of $\check{i}\check{e}$*

5.163 One of the most distinctive features of EWS texts is their use of the digraph ⟨ie⟩ for sounds which are the developments of: (1) palatal diphthongization of */e(:)/, see §§5.49, 53; (2) *i*-umlaut of the diphthongs */æɑ, æɑ, io, iō/ and, probably, */eo, eō/, see §§5.74, 5.82–4. Additionally, resolution of the hiatus found in forms such as **sī-e* ‘be’ subj.sg. appears to result in monosyllabic *sīe*, in which case ⟨ie⟩ must be a digraph, see however, §§5.146–7.¹ The use of ⟨ie⟩ as a digraph is almost solely WS, and possible instances of the same use in nWS are considered separately in §5.169, see also §2.37. There were chronological as well as dialectal restrictions on the use of the digraph, for even in EWS forms where ⟨ie⟩ would be expected etymologically are often spelled ⟨i⟩ or ⟨y⟩, and in LWS ⟨ie⟩ is regularly replaced by ⟨y⟩ or ⟨i⟩. In EWS the development is normally to ⟨i⟩ and the shift to ⟨y⟩ is mainly restricted to positions between a labial consonant and /r/; but in LWS the normal development is to ⟨y⟩ and the shift to ⟨i⟩ occurs principally before palatal consonants. Thus we find the following three types of development: (1) ‘normally’: *hīeran* > EWS *hīran*, LWS *hýran* ‘hear’; (2) between a labial and /r/: *wiersa* > EWS, LWS *wyrsa* ‘worse’; (3) before a palatal consonant: *mieht* > EWS, LWS *miht* ‘might’. The development of *īe* is therefore of importance not merely because it distinguishes WS from the nWS dialects, but also because it is perhaps the principal isogloss distinguishing EWS and LWS. Notwithstanding its importance, the issues surrounding the developments have never been satisfactorily resolved.² In approaching this problem the developments to /y(:)/ between a labial and /r/ in EWS and to /i(:)/ before a palatal in LWS are crucial. It is most

probable that a form such as *wyr̥sa* in EWS indicates /y/ and that a form such as *milt* in LWS indicates /i/, for the use of ⟨y, i⟩ here does not appear to deviate from the use of these graphs elsewhere. For the EWS case it can safely be inferred that the environment between a labial and /r/ promotes rounding, both on general phonetic grounds and from a comparison with other changes such as combinative breaking, see §§5.28–31. From the LWS case it can equally safely be inferred that a following palatal consonant would cause monophthongization, again both on phonetic grounds and from a comparison with such changes as palatal umlaut, see §§5.113ff. Hence it follows that it is proper to suggest that EWS and LWS contrast in the normal development of *īe*, in that in the former it is to /i(:)/, in the latter to /y(:)/. To account for these divergences and shifts we could easily suppose that ⟨ie⟩ represented a diphthong such as /iə, iǝ/ with some rounding of the second element, as suggested by Luick (1914–40: §191), or /iy, iȳ/ as suggested by Colman (1985), see below and §2.36.³ We would then have to suppose that in the dialects underlying EWS there was an early monophthongization to /i(:)/ except in the specified circumstances, and that similarly in the dialects underlying LWS there was normally monophthongization to /y(:)/. Thus in EWS there would be simple loss of the second element,⁴ whilst in LWS the loss of the second element would cause its rounding to be transferred to the first element. It is important to note that we cannot suppose a development of the form *hīeran* > EWS *hīran* > LWS *hȳran*, since normal EWS /i:/ does not give LWS /y:/, long vowel forms such as ÆLS(Basil) 379 *wrȳt* ‘write’ imp.sg. being rare, but see §5.173n1. On the other hand, one plausible interpretation of ⟨ie⟩ resulting from palatal diphthongization of */e(:)/ is that it represents /i(:)/, see §5.49n4. One plausible interpretation of ⟨ie⟩ due to *i*-umlaut is that it represents /iy, iȳ/, see §5.74. If the hiatus sequence **i-e* is resolved by diphthongization, it is most natural to assume that the resultant diphthong is /i:ē/, but see §§5.146–7. Of these three values for ⟨ie⟩ the last is least likely, for the reason given in n3 below and in §5.147. If the interpretation /iy, iȳ/ is accepted, as argued by Colman (1985) on the grounds of both *i*-umlaut and the LWS developments, it seems impossible to account for the ⟨ie⟩ spellings caused by palatal diphthongization.⁵ Even if Luick’s interpretation is accepted it must be noted that he supposes that /iə, iǝ/ is from earlier */iy, iȳ/, see Luick (1914–40: §191A4). This accounts for the slight rounding of the second element but then faces exactly the same difficulties as does Colman’s proposal. It would seem, therefore, that although the weight of the evidence points to the historical development suggested by Luick, the situation has not been satisfactorily resolved. But Luick’s suggestions imply that the later development of *īe* would be loss of the second element with, in LWS only, compensatory rounding of the first element. The EWS developments between a labial and /r/ and the LWS developments before a palatal would necessarily precede

the monophthongization. The general trend can be approximately characterized as follows:

$$\begin{bmatrix} \text{V} \\ +\text{syll} \\ +\text{high} \\ -\text{back} \end{bmatrix} \begin{bmatrix} \text{V} \\ -\text{syll} \\ +\text{high} \\ -\text{back} \\ +\text{rnd} \end{bmatrix} \Rightarrow \begin{bmatrix} \text{V} \\ \langle +\text{rnd} \rangle_{\text{LWS}} \end{bmatrix} \emptyset$$

¹ Campbell (1959: §229) suggests three other sources for *īe*. Firstly, from breaking due to metathesis, for example, *biernan* ‘burn’, see §5.26, although these spellings could also be interpreted as inverted spellings for *birnan*. Secondly, a number of cases where ⟨ie⟩ rather than ⟨io⟩ is found for the back umlaut of **i/i*, such as *tieling* ‘effort’, but these seem more certainly explained as inverted spellings for *tilung*, etc. Thirdly, EWS has, alongside forms such as *sindon* ‘they are’, *siendon*, etc. Although these could be explained as inverted spellings, it would then become difficult to explain LWS *syndon*, etc. These last cases are discussed under §5.173.

² An alternative account of the sounds represented by this digraph is offered in §5.164. The accounts differ most crucially in their starting-points, and, from a synchronic point of view, are identical for at least LWS.

³ It should be emphasized that a literal interpretation of ⟨ie⟩ as representing /ie, iē/ is scarcely available, for then it would be impossible to explain the LWS development to /y(:)/. Kuhn (1961) does, however, come close to this interpretation.

⁴ Since short diphthongs are monomoric, see §2.29, loss of the second element will not result in compensatory lengthening. In the case of long diphthongs the associated two morae will come to be associated with a long (bimoric) vowel.

⁵ The position is simpler for Colman since she does not accept the phonological reality of palatal diphthongization, see Colman (1985: 12–17) and, for the contrary view, §5.49 above.

5.164 It will be clear from the discussion in §5.163 that a diphthongal interpretation of original *īe* is problematic. As the earlier discussion of the *i*-umlaut of diphthongs shows, see §§5.74, 82–4, it is possible to interpret that change as having a monophthongizing as well as raising effect, especially in the light of the Angl shift of **/æɑ, æɑ/ > /e(:)/* in the same circumstances.

Similarly there is definite evidence that palatal diphthongization of **/e:/* could, at least in Nbr, involve merely raising rather than diphthongization, see §§5.49, 54. Finally, EWS forms such as *sīe* ‘be’ subj.sg. could well be interpreted as diphthongal rather than monophthongal, see §5.147. If original *īe* were monophthongal, then the vowel represented could only be high and front, since it results from fronting and raising processes, but it could not be equivalent to /i(:)/ or /y(:)/, since it develops differently from these sounds in both EWS and LWS. Consequently it could only represent a vowel intermediate between [i(:)] and [e(:)], say [i(:)]. In these circumstances ⟨ie⟩ would be a compromise spelling indicating a vowel half-way between those represented by ⟨i⟩ and ⟨e⟩.¹

¹ See here Lewenz (1908) and, more recently, Kim (1984: 28–9). Similar views on EWS *īe* can be found in Luick (1914–40: §263), Brunner (1965: §22), Daunt (1939), Reskiewicz (1953), Quirk and Wrenn (1957: §193). These writers assume that EWS *īe* derived from an original diphthong, but there is no absolute necessity for such an assumption. For further reasons for assuming a monophthongal interpretation see §5.171.

5.165 In EWS *īe* from whatever source is spelled both ⟨ie⟩ and ⟨i⟩. Thus we find from *i*-umlaut of */æɑ/ both *gēhīeran* and *gēhīran* ‘hear’, for *i*-umlaut of */æɑ/ *cierran* and *ciirran* ‘turn’, for *i*-umlaut of */iō/ *stīeran* and *stīran* ‘steer’, for *i*-umlaut of */iō/ *gēsīehð* and *gēsīhð* ‘he sees’, for palatal diphthongization of */e:/ *gīet* and *gīt* ‘yet’, for palatal diphthongization of */e/ *begietan* and *begitan* ‘obtain’, from resolution of hiatus *sīe* and *sī* ‘be’ subj.sg. In the more dubious instances of half-breaking, see §5.163n1 and references, we find *biernan* and *birnan* ‘burn’, and for back umlaut of */i/ *tielung* and *tilung* ‘effort’. For the relative frequency of these spellings in various EWS texts see especially Cosijn (1888a), Kim (1977: 207–21), and Bately (1980: xlii–xliii). The most notable variations from this, apart from ⟨y⟩ spellings, for which see §5.166, involve cases of back umlaut, for which see §5.104n8, and the *i*-umlaut of */io, iō; eo, eō/, for which see §5.84. Other forms such as *čerran* ‘return’ may be due to Merc influence. Alongside the variation between ⟨ie⟩ and ⟨i⟩ for original *īe*, there occurs variation between ⟨i⟩ and ⟨ie⟩ for original *li(:)l*. Typical examples of ⟨ie⟩ for *li(:)l* include *rīeče* ‘kingdom’, *gīetsian* ‘cover’, *īedel-* ‘idle’, *hīered* ‘household’, beside *rīče*, etc.; similar examples of ⟨ie⟩ for original *li* are *bieter-* ‘bitter’, *briengan* ‘bring’, *ciēričean* ‘churches’, *hiene* ‘him’, beside *biter-* etc. Generally speaking ⟨ie⟩ for *īe* is rather more frequent than ⟨ie⟩ for *li(:)l*, and ⟨i⟩ for *li(:)l* more frequent than ⟨i⟩ for *īe*, but there are exceptions.¹ For the conclusions to be drawn from these spelling variations see §5.171.

¹ Amongst exceptions to be noted are the frequent use in Or of *hiene* (231×) rather than *hine* (16×) and the restriction of ⟨ie⟩ for *li(:)l* in Chron(A) to (a minority of) forms of *hine*, *hire*, and *behinan* ‘on this side’. The most frequent use of ⟨ie⟩ in EWS is found in CP(H).

5.166 A regular exception to the above development in EWS occurs when *īe* is preceded by a labial, most frequently /w/, and followed by /r/. In this environment ⟨ie⟩ alternates with ⟨y⟩, as in *wyrsa* ‘worse’, *wyrð* ‘he becomes’, *hwyrfan* ‘turn’, *wyrpð* ‘he throws’, alongside *wiersa*, etc. and even alongside ⟨i⟩ spellings, such as *wirsa*. Examples where the labial consonant is not /w/ include: CP 69.22 *byrhto* ‘brightness’, CP(C) † 72.13, Or 21.6 *byrð* ‘he carries’, *byrnan* ‘burn’ and forms CP 1×, Or 2×, Or *fyr* ‘far’ and forms, frequently, CP(C), Or *fyrste* dat. (2×). The restriction of such examples to short vowels is a product of the environment, for other evidence shows

that the change theoretically affected *īe* also. In Or ⟨y⟩ spellings occur more extensively than in other EWS texts, examples in other environments including: 83.17 *abylgþe* ‘injury’ dat.sg., 93.24 *scýll* ‘scale’, *yldra* ‘older’ and related forms, 53.2 *cýrre* ‘occasion’, 31.44 † *besyrede* ‘he deceived’, and, with *īe*, (-)scýt ‘he shoots’, *aprytton* ‘they tired out’, note also CP 455.30 *týdra* ‘weak’. Occasional examples of ⟨ie⟩ for original *ȳ* are, in CP, 169.11 *īeðegende*, cf. CP(C) 168.11 *ȳðegende*, 251.24 *hwīe* ‘why’, and, in Or, 135.29 *afielde* ‘one filled with’, 154.24 *awierged* ‘strangled’.

5.167 In LWS the usual development of original *īe* is to ⟨y⟩, hence not only *wyrsa*, etc., cf. §5.166, but also *gehȳran* ‘hear’, *cýrran* ‘turn’, *hȳrnan* ‘burn’, and similarly the other examples cited under §5.165. However, forms where back umlaut fails are not so treated, hence Ælfric has *tilung*, *teolung* ‘effort’, suggesting that the EWS ⟨ie⟩ spellings are for /i/. The principal other exceptions¹ to the development to ⟨y⟩ are examples where *īe* stands before a palatal consonant, for there ⟨i⟩ spellings are normal, such as *miht* ‘might’, *niht* ‘night’, *hīg* ‘hay’, etc.²

¹ Gradon (1962: 70–2) suggests that the development to ⟨i⟩ spellings may also have occurred finally, as in *hī* ‘they’, the normal form in Ælfric alongside occasional (most often in ÆHom) *hȳ*, cf. EWS *hī*, *hīe*. However, *sȳ* ‘be’ subj.sg. is the normal form and *sī* occurs only sporadically in Ælfric. For comparison, in WHom *hȳ* outnumber *hī* about 2: 1 and *sī* occurs only twice, at WHom 8b.76, 84. It seems less likely that these variations are caused by phonological change than by morphological factors, with LWS *hī* directly derived from EWS *hī*, see 5.146–7 and, for LWS *hīe*, 5.146n1. For LWS *hȳ*, *sȳ*, see also §5.146.

² For the status of occasional exceptions to the above, see firstly Gradon (1962).

5.168 The considerable confusion of spellings in EWS, especially inverted spellings such as *rīeēe*, see §5.165, make it certain that original *īe* had already monophthongized to some kind of high front vowel by the time of these texts, if it was not originally monophthongal, as discussed in §5.164. If the LWS forms are to be derived directly from EWS, then the occasional ⟨y⟩ spellings cited in §5.166 and especially frequent in Or would imply that that high front vowel began to acquire rounding or some similar phonetic feature by the beginning of the tenth century. But an assumption of continuity between EWS and LWS implies that whatever values were represented by ⟨ie⟩ in EWS, they could not have been identical to those represented by ⟨i⟩, and there is no necessity to assume that the sounds represented originally by ⟨ie⟩ were not identical in EWS and LWS, see §§5.170ff. Thus the evidence of spellings of original *īe* alone can do no more than determine that the sounds represented by those spellings were already monophthongal by the time of Alfred. For further discussion of this and related matters see §§5.170ff.

5.169 Outside WS the digraph ⟨ie⟩ is only rarely used. Many apparent cases are better interpreted as hiatus sequences where ⟨e⟩ represents an unstressed syllabic vowel, such as Ps(A) *fiede* ‘he hated’ alongside *fīode*, see §§5.83n5, 146 for this and similar forms. There are, however, cases where ⟨ie⟩ seems to be a digraph, such as Ps(A) 32.13 *biefene* ‘heaven’ dat.sg., 32.15 *gehiewade* ‘he formed’, *ðīeda* ‘people’ gen.pl. (3×), 30.21 *gedīeda* ‘language’ gen.pl., and the slightly doubtful OccGl 49.1152a † *forbīet* ‘he forbids’. It is notable that the certain cases of digraphic ⟨ie⟩ outside WS are restricted to Ps(A).¹

¹ Additionally EpGl has 595 *fiert* ‘roof’, 933 *orfiermae* ‘squalid’, cf. ErfGl *orfermae*, 990 *georuierdid* ‘disgraced’ (also ErfGl), all with *i*-umlaut of **fio/* from breaking, and 983 *hunbieri* ‘fierce’, cf. ErfGl *unbh̄yri*, with *i*-umlaut of Gmc **iu*. But these forms are probably best interpreted as due to some kind of WS influence, see Pheiffer (1974: §90) and references.

(b) *The development of /i(:)/ and /y(:)/*

5.170 Already in EWS there are some signs of a tendency for /i/ to appear as ⟨y⟩ in a number of environments. The most usual cases involve either a preceding /w/, as in *nulle* < *ne wille* ‘I don’t want’, see §5.152, a preceding /r/, as in *ryht* ‘right’ < *riht*, or forms which are likely to have been weakly stressed, such as *syððan* ‘after’.¹ But the cases involving preceding /w/ may be quite separate phonologically from the others and are treated separately under §§5.180–2. In LWS, see below, such ⟨y⟩ spellings are rather more numerous and even appear occasionally in the case of /i:/. It is difficult to suppose that a preceding /r/ could have had the effect of rounding which we may assume for preceding /w/, for where /r/ has any phonological effect in OE it is usually one of retraction and/or lowering, as in the case of breaking, see §§2.74, 5.16. In the case of weakly stressed or unstressed /i/ rounding seems most unlikely, since no other similar case is evidenced in OE.² It seems more likely that in the kinds of environment specified above there was a tendency for /i/ to be laxated, that is, to become more centralized and lowered, to something like [ɪ].³ At much the same time, but perhaps a little later, in the same dialects /y/ must have been laxated to, say, [ɻ]. With this proposal may be usefully compared the Kt development of /y(:)/ > /e(:)/, which must have involved both lowering and unrounding.⁴

¹ To these cases might be added examples such as *byrnan* ‘burn’, alongside *biernan*, *birnan*, see §§5.166, 171.

² Indeed it is noticeable that where [ø], the *i*-umlaut of **/o/*, is weakly stressed, for example, as the formative element of weak class 2 verbs, it is always unrounded, see §§5.77 and n3, 6.10(2). Campbell’s suggestion (1959: §§317–18) that the spelling of /i/ as ⟨y⟩ indicates rounding seems to be based on the assumption that ⟨y⟩ necessarily represents [y].

³ See Gimson (1980: 104) for a description of a similar phenomenon in PDE.

⁴ Similar accounts to that given here are to be found in Lewenz (1908), Gradon (1962), and Kim (1984).

5.171 If the account given in §5.170 is correct, then in EWS there must have been a very complex relationship between several front vowel phones. These phones would be as follows: (1) [i], the normal development of OE /i/; (2), [Y] the result of laxing of OE /y/; (3) [ɪ], the result of laxing of OE /i/ in the environments specified in §5.170; (4) [i̯], the normal development of original *īe*, cf. §5.164.¹ Whatever the phonemic interpretation of these variations might be, it seems probable that WS scribes adopted a broadly consistent approach to the representation of these sounds. Thus [i] is regularly spelled ⟨i⟩, for example, *ridon* ‘they rode’, and [Y] is regularly spelled ⟨y⟩, for example, *cyning* ‘king’. As described in §5.170, [ɪ] can be spelled as either ⟨i⟩ or ⟨y⟩, the latter becoming more frequent in later texts. The reason for this was presumably that the initial choice was between ⟨i⟩ = [i] and ⟨y⟩ = [y], when the former would be favoured, but the gradual laxing of [y] > [ɪ] resulted in the choice being between ⟨i⟩ = [i] and ⟨y⟩ = [Y], when ⟨y⟩ would more clearly indicate the lax nature of [ɪ], see Gradon (1962: 75). For [i̯], as suggested in §5.164, the digraph ⟨ie⟩ was probably a compromise spelling to indicate a vowel half-way between [i] and [e], but the alternative EWS ⟨i⟩ spelling and the regular LWS ⟨y⟩ spelling would each naturally develop from the situation described immediately above.²

¹ The suggested phonetic transcriptions here are not intended to be accurate, but merely serve to distinguish symbolically the various sounds and to indicate in broad terms the probable phonetic tendencies in the development of each.

² Perhaps to be taken here is an unexplained development in LWS especially, whereby *sel-* develops to *syl-*. Thus we find regular LWS *syllan* ‘give’, *sylf* ‘self’ corresponding to EWS *sellan*, *self*, also common *syllic* ‘wonderful’ alongside *sellic* and rare *sylra* alongside usual *selra* ‘better’. It is possible that the change is also seen in Nbr (Li, DurRitGl) *sileð* ‘he gives’ alongside usual *seleð*, hence *silo*, *sila* ‘I give’. In Merc Ru1 *sylf* (4×), *sylle* ‘give!’ (1×), beside usual *sel-*, is probably a further sign of WS influence on the text, whilst Ch 204.1 *sile* may be due to the influence of 204.3 *siollanne* infl.inf. with *a*-umlaut of /e/ and ⟨io⟩ for ⟨eo⟩. The Kt forms Ch 1482.37 *sylfum* is difficult, as it occurs alongside 1482.25 *siolf*. An explanation for these developments must be sought most probably either in the developments outlined in this section or in the equally difficult breaking forms discussed in §5.22. Alternatively, one might look to the suggestion of Bülbring (1900a) that /s/ could acquire a dorso-alveolar or prepalatal articulation.

5.172 Excluding examples involving negative contraction, see §5.152, the principal examples of the shift from ⟨i⟩ to ⟨y⟩ in EWS texts are as follows.¹ Firstly, after /r/, *ryht* ‘right’ and various derived forms, but see §5.114 and n1, CP(C) 218.7 *abrycð* ‘he storms’, CP(H, C) *fryccea* ‘herald’, CP(H)

-*sprynge* 'spring' (3×), Chron(A) 755.21 *bryttiscum* 'British' dat.sg., 896.6 *gerypon* 'they reaped', Or(B) 45.9 *drync* 'drink!', 11.13 *aspryngð* 'it springs up'. Secondly, in low stress positions² we find *ðysum*, *ðyses*, and various other forms of *þes* 'this',³ and in Chron(A) *ylcan* 'same' (5× to 912), *mycel* 'much' (2×), also CP(C) 368.13 † *mycele*. A number of words also show ⟨y⟩ in environments other than those specified above, such as CP *clypian* 'call', *ägylðan* 'pay', CP(H, C) *symle* 'always' (6×), *hlynigen* 'lie down', Or(B) 99.11 *symbel* 'always',⁴ 2.27 *bysmerlic* 'shamefully', 2.4 *bysmredan* 'they disgraced'. Some at least of these forms may be precursors of the more extensive use of ⟨y⟩ in LWS.⁵ In addition to these examples we find cases of ⟨ie⟩ spellings for /i/ in the same environment, such as *briengan* 'bring', *hieder* 'hither', *hiene* 'him'. Whether these are merely confused spellings for /i/ or an alternative representation of the laxing of /i/ seems impossible to determine, see also §5.165.

¹ Except in the case of *ryht*, which is the normal form in EWS, all the ⟨y⟩ spellings cited here are rare examples alongside normal ⟨i⟩.

² *Dyde* 'did' is not to be placed here, both because it would not normally be low stressed and because it is common OE. For some discussion of the source of /y/ here see Brunner (1965: §358A1).

³ It must be recalled that spellings of the type *synd*, *synt* 'they are' in Or are from ms. C, essentially LWS.

⁴ Other forms apparently identical to this are either from ms. C or forms of *symbel* 'feast' with /y/ due to *i*-umlaut.

⁵ Or also has 155.23 (B) *ciningum* 'king' dat.pl. and 97.22 (B) *genihtsumnisse* 'abundance', showing ⟨i⟩ for the *i*-umlaut of */u/, both probably no more than scribal errors.

5.173 In LWS the tendency for /i/ to lax and be represented by ⟨y⟩ is greater, at least in low stress environments. Nevertheless, in texts such as ÆCHom ⟨y⟩ spellings are still very sporadic in most cases, for example, *ys* 'is' 2×, *hys* 'his' 3×, *hyt* 'it' does not occur, *þyses* 'this' gen.sg. 24× (against *þises* 59×), *synd* 'they are' 43× (against *c.*400× *sind*). For further exemplification of the situation in one clearly Ælfrician ms., ÆCHom I 5(R), see Gradon (1962: 72ff.), from which it is clear that laxing could take place even under primary stress, and that preceding /r/ did not have the same effect as in EWS. Note especially that the standard LWS form of EWS *ryht* is *riht*, see §5.114 and n1. In other LWS texts, such as WSCP, ⟨y⟩ spellings are much more frequent. Thus in that text *is* outnumbers *ys* only in the approximate ratio 4:3.¹

¹ The possibility of laxing under primary stress is confirmed by the occasional LWS laxing of /i:/, as in *ȳdel* 'idle'. Thus in ÆCHom and some other Ælfrician texts *ȳdel* and forms considerably outnumber *idel*, although the same does not hold for Wulfstan, where *ȳdel* is entirely absent.

5.174 Outside WS such variation between ⟨i⟩ and ⟨y⟩ is very rare, and the most usual cases are where ⟨i⟩ substitutes for ⟨y⟩. Examples of this substitution in the early Merc glossaries are: EpGl 199 *smīgīlas* ‘burrows’, 621 *cistīgīan* ‘munificent’, 701 *gēnicl̥d̥ae* ‘knuckled’, ErfGl 2 *risil* ‘fat’ (Lat *axungia*), also CorpGl 219 *rizel* (Lat *arvina*), 275 *hirnitu* ‘hornet’, 277 *mich* (= *myc̥g̥*) ‘midge’, 372 *aritr̥id* (= *arydid*) ‘plundered’, 711 *libb* ‘medicine’. But these may be no more than scribal errors for ⟨ui⟩, which occasionally occurs in these glossaries, see §2.18. In Ps(A) the substitution only occurs in 50.14 *gētrime* ‘strengthen!’, whilst Ru1 has ⟨i⟩ in the following words: *drihten* ‘lord’ and forms (21× ⟨i⟩, 52× ⟨y⟩), *kin̥ing*, *king* ‘king’ (against 20× *cyning*, etc.), *gēnihtsum-* ‘abound’ var.infls. (2× against 7× ⟨y⟩), and *ðincaþ* ‘they think’ against ⟨y⟩ 6×. In Nbr such variation is not found in the early texts, but in later texts *drihten* is invariable.¹ Other examples are sporadic: MtGl(Li) 1.6, DurRitHyGl 134.1 *cinig* ‘king’, MtGl(Li) 15.11 *ofcimes* ‘he proceeds’, DurRitGl 9.39 *gētrimað* ‘he strengthens’.^{2,3}

¹ *Drihten* cannot be due to palatal umlaut which does not otherwise occur in Nbr, see Bülbring (1899a: 70), Lindelöf (1901: §72A1).

² Note that *cinig* is not frequent, *pace* Campbell (1959: §315), and for *gēstir* = ms. *gēs̥c̥ir*, see Campbell (1972: *gēstyr*).

³ Nbr also has *symle* ‘ever’ for *simle*, thus showing the reverse substitution. For examples of ⟨y⟩ for /i/ after /w/ see §5.181.

5.175 The evidence from the texts cited above suggests that the laxing of /i/ began very sporadically in WS only at about the time of the Alfredian texts, and that the change was restricted to some (at least) WS dialects. Examples from the early Merc glossaries do not support an earlier date, see §5.174, and other examples from nWS are too infrequent to suggest that the change was widespread there. The relative infrequency of ⟨y⟩ spellings in Ælfrician, as opposed to other LWS, texts could either show the presence of a careful spelling tradition in the *Schriftsprache* or that laxing of /i/ was less frequent in the dialect which underlay that language. On the other hand, the evidence of other LWS texts shows that laxing of /i/ was widespread and frequent by that time. For the reasons stated in §5.171 it seems likely that laxing of /y/ occurred at a slightly later date than laxing of /i/, but that too must have been fully under way by the LWS period.

XVI The influence of /w/

5.176 From the earlier changes of breaking and back umlaut there is clear evidence that a preceding /w/ could cause retraction and/or rounding beyond the normal limits of those changes, for example, forms such as Nbr *sword*

'sword' < **swerd*, cf. WS *sweord*, *wudu* 'wood' < **widu*, cf. Kt *wiada*, *weoda*. For discussion and exemplification of such cases of combinative breaking and combinative back umlaut see §§5.28ff, 5.108ff. During the period of the written texts /w/ comes to have a further similar influence on following front vowels and diphthongs. It is possible to distinguish two forms of the influence exerted by /w/, these two forms differing in both their phonological effect and their dialectal distribution. The first, occurring extensively in Nbr, may be taken under the heading of rounding, the second, more or less confined to LWS, may be taken under the heading of raising. The latter change, however, also involves retraction of the following vocalic sequence wherever possible. Given the phonetic nature of /w/ the changes are clearly all instances of the assimilation of a vocalic sequence to a preceding /w/. Although rounding after /w/, as in Nbr, and raising between /w/ and /r/, as in LWS, have phonologically much in common, the two changes are best kept separate because of their dialectal distribution, and are therefore discussed separately below.

(a) Rounding

5.177 In NNbr especially, and to a lesser extent in other N dialects, there is a very strong tendency to round /e/, less frequently /e:/, to /ø, ø:/ after /w/, hence such examples as *woer* 'man' < *wer*, *wōēron* 'they were' < *wēron*. This is clearly the result of the feature of rounding inherent in /w/ being transferred to the immediately following vowel, and the change may therefore be approximately characterized as follows:

$$\left[\begin{array}{c} \text{V} \\ \text{-high} \\ \text{-low} \end{array} \right] \Rightarrow [+round] / \left[\begin{array}{c} \text{C} \\ \text{+round} \end{array} \right]$$

5.178 There is no sign of this change in the earliest Nbr texts, thus CædH 3 *uerc* 'work'. But in the later Nbr texts DurRitGl shows the change practically without exception and Li has the change very frequently with the short vowel and frequently with the long vowel. Typical examples in addition to *woer*, *wōēron* are: *woeg* 'way', *woerc* 'work', *woes* 'be!', *cwoeða* 'say', *swoefen* 'dream', *twoelf* 'twelve', *woenda* 'go', *wōēde* 'garment', *wōēpen* 'weapon', *cwōēdon* 'they said', *hwōēr* 'where', *twōēge* 'two', *wōē* 'we'.¹ In Ru2 such rounding is practically absent except in *woeg*, hence *awoeg* 'away', see Lindelöf (1901: §93b) for discussion. The change is not found elsewhere.

¹ Occasional ⟨oæ⟩ spellings, such as DurRitGl 1 15.27 *woæca* 'we keep watch', MkGl(Li) 14.69 *cwoæða* 'speak' are of no significance, despite §5.179.

5.179 In the dialect of Ru1 there is a frequent change of *we* > *wæ*, for example, *wæg* ‘way’, whose precise significance and cause remain uncertain. It seems most plausible to assume, however, that it is due to the influence of /w/, and it may not be unconnected with the rounding process discussed above, for similar forms are also found very occasionally in Nbr. Typical forms in Ru1 are: *cwæð* ‘speak!’, *cwæðende* ‘speaking’, *wæl* ‘well’, *wælig* ‘rich’, *swægre* ‘mother-in-law’, *swælteþ* ‘he dies’, in all cases alongside forms with ⟨e⟩, such as *cweþ*.¹ But a similar change occurs in other words too, especially before *fn*, *gn*, for example, *stæfn* ‘voice’, *þægn* ‘servant’, and it may be, as suggested by Kuhn (1939, 1945), that the scribe is merely confused and unable to distinguish Merc usage from that in WS, see Campbell (1959: §259n1) for criticism of this view.² In Nbr Li has, for example, *wæras* ‘men’, *wælig* ‘rich’, and it is unlikely that such forms are to be subsumed under back umlaut, see, however, Campbell (1959: §210.2n4).

¹ Examples of ⟨æ⟩ spellings for \bar{e}_1 in the same text, for example, *cwæðun* ‘they spoke’ and especially *wærun* ‘they were’, *hwær* ‘where’, could indicate the same phenomenon, but could equally well be due to scribal confusion through WS influence.

² Luick (1914–40: 289), after Gabrielson (1912: 208), argues that the appearance of ⟨æ⟩ is analogical, but this is scarcely plausible.

5.180 A possible parallel shift of /i/ > /y/ is more sporadic, and only occurs with the short vowel, but cf. §5.166 for the EWS development of *ie* > /y/ in labial environments. Dialectally, however, this shift is more widespread than the rounding of /e(:)/, being found in both EWS and LWS as well as Nbr. However, in Nbr at least some of the forms might be explained as inverted spellings after unrounding of /y(:)/, see §5.174 and n1, 3, and in WS the forms could be explained under §5.170. How far, therefore, we are dealing with a genuine extension of the influence of preceding /w/ remains dubious.

5.181 Examples in EWS are extremely rare: CP 205.12 *swyngean* ‘strokes’, CP(C) 18.22 † *nōwyht* ‘not’, CP(C) 218.15 *cwyde* ‘saying’.¹ But in LWS the rounding is more frequent. Thus ÆCHom has almost equal numbers of *wylle* and *wille* ‘I wish’, and the rounding is found in numerous other forms, such as *hwylc* ‘which’, *swylc* ‘such’. In NNbr the only form which shows such rounding at all frequently is *wynn* ‘work’ and derived forms, but note also DurRitGl 1 9.4 *suyppa* ‘whip’ (alongside 22.20 *suippum*). In Ru2, however, there are a number of examples, notably of *wyllo* ‘I wish’ and forms, but also of *wynster* ‘left’.²

¹ CP(C) 184.15 † *swýra* ‘neck’ should not be included here, see §5.127n1.

² Luick (1914–40: §283A2) and Girvan (1931: §126A) see Ru2 *wyllo* as due to the influence of *nyllo* ‘I don’t wish’, but this explanation may be unnecessary.

5.182 It is doubtful whether the rounding attested in contracted forms such as *nylle* ‘don’t want’ < **ni wille* should be included under the present heading, since it is widely and regularly attested in all dialects. That shift would appear to involve low stress, see further §5.152.

(b) *Raising*

5.183 In LWS there is an increasing tendency for short vowels and diphthongs between /w/ and /r/ to be raised and, where appropriate, retracted to /u/. The sounds affected by this change are /eö, y, o/, with the change only being reasonably frequently represented in the case of /eo/, where spellings such as *swurd* ‘sword’ < *sweord* exist alongside the diphthongal spellings. The change does not affect *æ, a*, or the diphthong *ea*, which implies that it could only affect nonlow vowels. Further, the change does not affect *e*, hence LWS *wer* ‘man’.¹ It seems most probable, therefore, that only rounded segments were affected and that by this time *eo* was developing into /ø/, see further Brunner (1965: §113A1) and §5.207. The change may therefore be approximately characterized as follows:^{2,3}

$$\left[\begin{array}{c} \text{V} \\ -\text{low} \\ +\text{rnd} \\ -\text{long} \end{array} \right] \Rightarrow \left[\begin{array}{c} +\text{high} \\ +\text{back} \end{array} \right] / \text{w/} \text{ ______ } / \text{r/}$$

¹ There are, of course, no cases where /i/ appears in this environment. The arguments to the contrary in Girvan (1931: §120A1) are unconvincing.

² For convenience the phonetic features of /w/ and /r/ have not been specified.

³ The change also may be inhibited by a velar consonant immediately following /r/, for forms such as *wurc* are rare, for example, HomS 38, 49 *wurc* and forms (2× each). LWS *worc*, especially common in Ps(C), can scarcely be an example of combinative breaking, but is not easily explained. Luick’s (1914–40: §266A2) suggestion that the form is a low-stress one originating from a compound such as *handweorc* is possible but not demonstrable, and the form is not EWS, see §5.30n3.

5.184 In EWS there are almost no signs of the change of *weor* > *wur*, except perhaps in Or *Geoweorþa* for Lat *Jugurtha*, where it is generally assumed that ⟨weor⟩ represents a scribal interpretation of /wur/ as heard in dictation, thus indicating a falling together of *weor* and *wur*.¹ In LWS, although the most usual forms are, for example, *weorþan* ‘throw’, *weorþan* ‘become’, *weorþian* ‘honour’, *sweord* ‘sword’, ⟨u⟩ spellings can be found in many mss. In ÆCHom *wurþan* occurs 4×, *wurþað* 10×,² *wurþian* 12×, *swurd* 12×, and the only comparable form with ⟨eo⟩ is ÆCHom I 18 246.9 *weorþað*, although similar spellings are found in related forms. But in WHom almost the reverse obtains, with an overwhelming majority of ⟨eo⟩

spellings. Amongst important examples are common LWS *swura* ‘neck’ and occasional *hwuru* and forms ‘crooked’, for the implementation of the change here demonstrates a short vowel despite the loss of *h*, see §5.127 and n2.

¹ But such a conclusion is not necessarily safe. Presumably the Latin word was approximately /juwurθa/, with in OE initial /ju-/ being transcribed quite normally as ⟨geo⟩, see §5.60. Given the use of ⟨eo⟩ to represent /u/ in the first syllable, it would not be surprising if the scribe then carried over this spelling convention to the second syllable, also containing approximant + /u/. Although the form occurs 15× in Or, the occurrences are all in the same section except for one occurrence in a chapter heading, and therefore could well be interpreted as due to interference from the first syllable rather than the early implementation of the present sound change.

² Not distinguishing between *wurþað* ‘they become’ and *wurþað* ‘he honours’.

5.185 Retraction of *wyr* > *wur* is very sporadically represented in LWS texts, but some examples include: AldV *wurdwritere* ‘historian’ (2×), ÆLS, ÆHom *wurm* ‘worm’ and related forms (9×), Mt(WSCp) 3.10 *wurtrumum* ‘root’ dat.pl., all of which show retraction of /y/ the *i*-umlaut of */u/. ÆCHom II (5×), ÆLS (2×), Lk(WSCp) 21.36 *wurþe* ‘worthy’, ÆLS (Aethelthryth) 65 *gewurpan* ‘recover’, AldV 1 *wurste* ‘worst’ show retraction of /y/ < *ie.¹

¹ There are also a number of cases of ⟨y⟩ for ⟨eo⟩ which imply that /eo/ and /y/ had merged as /u/. Examples are apparently found as early as CP 191.15, 339.18 *wyrðen* ‘might be’, later examples being *cwyrn* ‘mill’ and forms, especially frequent in ÆHom 19 but also found in ÆCHom I 34, ÆGl and Mt(WSCp), Beo, Jud *swyrd*, also in Ps(C). An example of ⟨eo⟩ for ⟨y⟩ is And *weorm* ‘worm’, rarely found elsewhere.

5.186 The only certain examples of raising and retraction of *wor* > *wur* are: WSCp *wurd* ‘word’ and forms (*c.*8×), Mt(WSCp) *gewurden* ‘become’ (2×). Additionally Lch II(2) 20.1.8 *wurms*, AldV 1 4873 *wurms* ‘pus’, ByrM 1, also AldV 1 *wurdlian* ‘speak’ and forms occur, but these may be from earlier forms with *y*, see Gabrielson (1912: §425), and HyGl 2 *wurolde*, *wurolða* could be from earlier *worold* or *weorold*, see §5.110.

5.187 Chronologically the changes of rounding and of raising probably occurred at much the same time. Rounding of /e(:)/ cannot have taken place by the time of the eNbr texts, given CædH *werc*, and in any case for such a form to undergo rounding Angl smoothing must have already taken place. Since that change is to be dated just before the time of the earliest texts, see §5.102, and since CædH is mid eighth-century, it is impossible for the rounding to have been much earlier than *c.*800. But the change is fully operative in later Nbr, and therefore must be dated between *c.*800 and *c.*950. A similar dating for the other cases of rounding discussed above seems likely, although an early tenth-century date for the sporadic rounding

of /i/ fits the WS evidence best. Despite the example of *Geoweorþa*, see §5.184, it is most likely that raising and retraction between /w/ and /r/ is not to be found in EWS, but is reasonably common at least in some LWS dialects of the late tenth century, notably Ælfric. Such texts also show that this change change only commonly affected *weor* sequences in the OE period, although the same change does affect *wor* sequences quite extensively, *wyr* sequences less so, in ME. We may therefore conclude that the change started with *weor* sequences during the tenth century, only gradually spreading elsewhere during the course of the next century.

XVII The development of Kentish front vowels

5.188 After the operation of *i*-umlaut but before the time of the earliest texts, Kt had the following front vowels: /i(:), e(:), æ(:), y(:), ø(:)/. This system was essentially the same as that in WS, for /æ(:)/ was the reflex of both Gmc **ǣ* (*ǣ*₁) and Gmc **ai*, the latter by *i*-umlaut to *ǣ*₂, see §§3.24–5, 5.79(1) and below. But by the late tenth century, as evidenced in OccGl 49, the front vowel system had been radically simplified with all vowels except /i(:)/ merging with /e(:)/. Although the consequences of these various mergers are unitary, see J. M. Anderson (1988a), it seems probable that each vowel shifted to /e(:)/ independently and that therefore it is not proper to give a single description of all three mergers. The reasons for this are mainly chronological, see further below. One consequence of the mergers is that Kt texts often show inverted spellings, that is, spellings in which ⟨æ⟩, ⟨y⟩ – but not ⟨oe⟩, see §5.192n1 – appear for /e(:)/ in words which did not originally have /æ(:), y(:)/, such as *ærfē* ‘inheritance’ = *erfe* < *earfe*.

(a) Raising of *ǣ*

5.189 In eighth-century Kt texts, that is, Ch 21, 23–4, 31 (see Campbell, 1959: §289n2), there is no evidence of raising of *ǣ*, hence Ch 21 *paed* ‘path’, all texts *aethel*- personal name-element. In texts of the first half of the ninth century ⟨æ⟩ spellings predominate greatly, such as Ch 1188 *mæge* ‘I may’, *aelmessan* ‘alms’, Ch 41, 1482 *hæbbe* ‘I have’, *hwæt* ‘what’, both *æt* ‘at’. A minority of ⟨e⟩ spellings include Ch 1188.21 *ðet*, 34 *ðette* ‘that’, 19 *festendæg* ‘fast-day’, Ch 1482.28 *hebbe* ‘has’ pr.subj., 58 *deg*, 38 *dege* ‘day’. In texts of this date occasional inverted spellings with ⟨æ⟩ can also be found, such as Ch 41.17 *oncærrende* ‘turning’, Ch 1188 *gæfe* ‘grace’ (2×), Ch 1482 *ærfe* ‘inheritance’ (3×), alongside *erfewearða* ‘heirs’, *sæleð* ‘gives’. Such inverted spellings are slightly more frequent than cases of ⟨e⟩ for *ǣ*. In the second half of the ninth century ⟨e⟩ spellings come to predominate, even in some cases, such as Ch 1195, to the complete exclusion

of ⟨æ⟩, and in other cases, such as Ch 1510, ⟨æ⟩ and ⟨e⟩ spellings appear to be interchangeable. In OccGl 49 ⟨e⟩ predominates greatly over ⟨æ⟩,¹ and note the rare inverted spelling 498 *wær* ‘man’.²

¹ In OccGl 49 ⟨æ⟩, usually editorialized as ⟨e⟩ is used rather than ⟨æ⟩. It is doubtful that this has any significance, *pace* Williams (1905: §§102–4), see also §2.12n1. The same usage is frequently found in the Surrey Ch 1508.

² For the development of *æ* < **a*+nasal by *i*-umlaut, see §5.78(1).

5.190 In eighth-century Kt texts \bar{a}_1 is spelled ⟨e⟩ at Ch 21.3 † *mēguines* personal name, † *strētleg* place-name, but the texts have Mercianisms elsewhere, such as 21.7 † *aehcha* personal name with Angl smoothing, and therefore the forms are of uncertain value. On the other hand \bar{a}_2 is spelled ⟨æ⟩ at Ch 21.7 *āēssica* personal name. Of early ninth-century texts Ch 41 consistently spells \bar{a}_2 as ⟨æ⟩, for example, 8 *arēddan* ‘they determined’, 16 *nēnig* ‘no’, but has no certain examples of \bar{a}_1 .¹ In other texts of a similar date, however, both \bar{a}_1 and \bar{a}_2 are freely written as either ⟨æ⟩ or ⟨e⟩, and in the latter half of the century the situation is similar to that for short *æ*. Similarly in OccGl 49 ⟨e⟩ spellings predominate, although ⟨æ⟩ spellings occur slightly more frequently for \bar{a}_1 than for \bar{a}_2 , see Williams (1905: §§6, 30). It would appear that in the ninth century both \bar{a}_1 and \bar{a}_2 were still distinguished from *e*, for the latter is rarely spelled ⟨æ⟩ by inversion.²

¹ Unless *swæ* ‘so’ (7×) is taken as a genuine example of \bar{a}_1 , see §3.25n1.

² In early ninth-century texts the only example of such inverted spellings is Ch 1188.43 *hāēr* ‘here’. Other cited examples, such as *mēgas* ‘kinsmen’, are simply examples of \bar{a}_1 etymologically spelled.

5.191 From the evidence of the early Kt texts it would appear that the raising of short *æ* can be dated early in the ninth century, since eighth-century texts do not show the change, but it became increasingly well represented over the next half century. Since, as seen in §5.190, most Kt texts treat \bar{a}_1 and \bar{a}_2 similarly, it seems likely that they were both raised to \bar{e} at the same time, and further that the raising of the long vowels occurred at the same time as the raising of the short vowel.¹ We may therefore conclude that this process of *æ*-raising was unitary and specifically Kt of the first half of the ninth century.² This, of course, implies that Kt was originally an \bar{a}_1 -dialect, and not, as is usually claimed, a dialect where $\bar{a}_1 = /e:/$. For full discussion see §3.24, also Crowley (1986).

¹ For further details see Hogg (1988). The often-made connection between Kentish raising and second fronting seems spurious, see §5.87n1 and references therein. It may be that Kentish raising is dialectally extended to the sporadic Angl raising of \bar{a}_2 before dentals, see §5.79n1, but the situation remains obscure.

² Campbell (1959: §290) suggests that the raising may have been earlier but obscured by Merc spelling traditions which strongly influenced early Kt. This seems more plausible than the suggestion of Toon (1983: 150–2) that raising of short *æ* was in fact due to second fronting introduced during the period of Merc domination of Kent.

(b) $\check{o}\check{e} > \bar{e}$

5.192 As stated in §5.77, /*o(ɪ)*/, the *i*-umlaut of */*o(ɪ)*/, was regularly unrounded to /*e(ɪ)*/ in S dialects, the change being virtually complete in WS by the time of the EWS texts. The earliest example in Kt of such unrounding is Ch 41.8 *gerēfa* ‘reeve’ at the beginning of the ninth century, cf. Ch 1482.1 *gerōēfa*. The only other reasonably certain example before c.850 is Ch 1197.22 *blēdsung* ‘blessing’,¹ although this could also have involved early shortening, see §5.200. After this time, however, ⟨*e*⟩ spellings quickly become more frequent, and in OccGl 49 no ⟨*oe*⟩ spellings are found.²

¹ Ch 1188.22 *tuāgen*, 1482.18 *twāgen* ‘two’, also found frequently in Ru1, could well come from earlier **twājen* rather than **twōjen*, and hence show the etymologically correct vowel, see Girvan (1931: §24A). Also cited as an inverted spelling is Ch 1200.5 *bōēm* ‘both’, but this charter is now dated 867x870. It is also noteworthy that if this is a case of inversion, it appears to be the only such case.

² Kt scribes often write ⟨*eo*⟩ for ⟨*oe*⟩, see §2.17n1.

5.193 The evidence presented in §5.192 makes it probable that unrounding of $\check{o}\check{e}$ occurred in Kt in the middle and second half of the ninth century, roughly at the same time as in WS. Whether the Kt change was independent or the result of WS influence is difficult to determine. Given these dates, the very early *gerēfa* may well be a scribal error.

(c) $\check{y} > \check{e}$

5.194 The shift of /*y(ɪ)*/ > /*e(ɪ)*/ is scarcely represented before the end of the ninth century, exceptions being Ch 1200 *yfter* ‘after’ (2×), where ⟨*y*⟩ is an inverted spelling for *efter* < *æfter*, and perhaps also Ch 328.9 *Heregēde* (< *Heregȳde*) personal name, and the inverted spelling ChHead 1204 2.5 *fȳt* ‘feet’ (= *fēt* < *fōēt*), all texts belonging to the second half of the ninth century. In the later OccGl 49, however, ⟨*e*⟩ spellings predominate, such as 784 *ferht* ‘fear’, *gerdels* ‘girdle’, 1020 *leras* ‘losses’, 58 *onhere*, 886 *onherie* ‘imitate’, *brēcō* ‘he enjoys’, 331, 452 *-tēnð* ‘opens’, 176, 781 *behēd* ‘hidden’. Note especially 454 *netenes* ‘ignorance’ < *nytenes* with *y* due to contraction of **ni-wi*, see §5.152. ⟨*y*⟩ spellings in the same text are found in a minority of forms with a short vowel, such as 67, 558 *cyne-* ‘royal’, 157, 352 *ymb-* prefix, and with a long vowel only in 478 *cȳðere* ‘witness’. Occasional inverted ⟨*y*⟩ spellings are found, such as 1111 *hrȳremūs* ‘bat’, *lȳces* ‘leech’, *mȳgð* ‘family’, 1101 *lȳssan* ‘less’, 614 *cȳrð* ‘he turns’.

5.195 The evidence presented in §5.194 makes it probable that the unrounding and lowering of y was somewhat later than the other changes discussed above and that the change only began in the latter half of the ninth century and was not fully implemented until the tenth century. Note particularly that the ninth-century examples must be somewhat uncertain, since both *yfter* and *Heregēðe* could be low-stress forms.

(d) *Summary*

5.196 The above evidence suggests that it is most reasonable to conclude that the first of the three changes was æ -raising, which probably took place at about the beginning of the eighth century and uniformly affected all instances of $\check{\text{æ}}$ of whatever origin. In this respect the change is distinctively Kt and not, directly at least, connected with similar changes in Merc. The unrounding of $\check{\text{o}}\check{\text{e}}$, however, seems to have been part of the general unrounding of $/\text{o}(:)/$ in S. dialects, which belongs to the second half of the eighth century. Slightly later still took place the distinctively Kt shift of $\check{y} > \check{e}$.

XVIII Changes in quantity

5.197 During the OE period a number of changes in vowel quantity occurred. These changes shared a common feature, in that all were dependent upon OE syllable structure and stress patterns. Essentially these changes appear to have occurred in order to approximate as far as possible to isochronous intervals between stressed syllables, see Luick (1914–40: §203). If a stress foot is defined as a phonetic string commencing at the peak of one stressed syllable and ending immediately before the peak of the next stressed syllable, then we may say that the changes described below were brought about by the tendency to equalize the lengths of stress feet. The changes which occurred may be subdivided as follows: (a) lengthening in monosyllables; (b) vowel shortening; (c) vowel lengthening. Each is discussed separately below.

(a) *Lengthening in monosyllables*

5.198 Throughout the history and prehistory of English there has been a requirement that the rhyme constituent of a stressed syllable must be at least bimoric, that is, contain either a long vowel (or diphthong) or a short vowel (or diphthong) followed by a consonant in the same syllable. Such a change clearly ensures that a stress foot will be of a certain minimum duration and thus aligns with the tendency described in §5.197, for further discussion see §2.80–1. In OE this requirement leads to a considerable

variation in form in those monosyllables which could be stressed or unstressed according to their position in the sentence or emphasis, for example, *þū* 'thou', *wē* 'we' and many other pers.prons., *sē* 'that', *nū* 'now', *swā* 'so', *tō* 'to'.¹ Lengthening also takes place in the prefixes of *twīfeald* 'twofold', *þrīfeald* 'threefold' consequent upon these prefixes receiving the main lexical stress.²

¹ For the similar but more complex position in PDE, see the discussion of strong and weak forms in Gimson (1980: 260–4).

² There is also some evidence that vowel lengthening took place in monosyllables closed by a single consonant, for example, *ÆGram* 126.12 *ġetēl* 'number' acc.pl. instead of the expected *ġetelu*, see Napier (1899), Bülbring (1902: §284). But the evidence is sparse and the change seems to have been sporadic. Nevertheless, the processes involved are clearly similar to those in monosyllabic lengthening and in the vowel lengthening discussed under (c) below.

(b) Vowel shortening

5.199 Another method of equalizing the length of stress feet is to shorten over-heavy syllables, that is, syllables containing a long vowel (diphthong) and two consonants.^{1,2} Shortening of such structures was achieved in OE by shortening the long vowel, as exemplified in *bremblas* < **brēmblas*, see §5.78(2), *godspell* 'gospel' < *gōdspell*, see Luick (1914–40: §204A1), and in many cases where a geminate consonant is followed by /r/, such as *næddre* 'adder' < *nāddre*, *blæddran* 'bladders', *ričcra* 'more powerful'. In some instances shortening in inflected forms, such as *attres* 'poison' gen.sg., *moddra* 'mothers', can be analogically extended to uninflected forms, as indicated by consonant doubling in *attor*, *moddor*, etc.

¹ The change is usually described as taking place when three consonants follow the long vowel, see, for example, Luick (1914–40: §204.1), Campbell (1959: §285). But given the structure of OE syllables, see §2.80–1, it seems preferable to say that the change takes place if two consonants follow in the same syllable, and that further the following syllable must begin with a consonant. An analogous situation holds for the change described in §5.200, and see further §5.201.

² An exception to these changes occurs when the following consonant cluster is /st + liquid, for example, *wræstlian* 'wrestle', hence ME *wrestlen* alongside *urastlen*, *þēostre* 'dark'. No doubt this is a consequence of the special status of /s/ + stop consonant clusters in OE, see §2.83.1, also Luick (1914–40: §204A3). A comparison with PDE may be helpful, see Hogg and McCully (1987: 48–9).

5.200 In addition to the changes described in §5.199, long vowels were also shortened when followed by at least one consonant in the same syllable and two further syllables.¹ This change is clearly a further instantiation of the tendency to equalize stress feet. Typical examples include: *bletsian* 'bless', cf. *blōd* 'blood', compounds in *en-*, such as *endemes* 'together',

endleofan ‘eleven’, *enwintre* ‘one year old’, cf. *æne* ‘one’ acc.sg.masc., compounds in *sam-*, such as *samcucu* ‘half-dead’, *samboren* ‘prematurely born’.^{2,3}

¹ In some cases shortening appears to take place before geminates even when only one syllable follows. Thus Angl *enne*, see below and §5.79(1), Nbr *leassa* ‘less’ with back umlaut of /æ/, *sioððan* ‘since’, with back umlaut of /i/, see §5.107, LWS *sylla*, *sylra* ‘better’, with *sel-* > *syl-*, see §5.171n2, also Nbr *sella*, where the absence of ⟨oe⟩ spellings more probably indicates a short vowel than a long, see §5.77. For other possible examples see Campbell (1959: §286).

² Then by analogical reformation forms such as *sambāl* ‘weak’.

³ There are a further number of cases where vowel shortening occurs outside the limits of §§5.199–200. Such forms are indicated by orthographic doubling of a single intervocalic consonant, which probably also reflects a phonological doubling, and they are exemplified by, for example, *reccan* ‘care’, *ðrittīg* ‘thirty’. For discussion of this obscure and uncertain change see Campbell (1959: §287).

5.201 The changes described above are clearly related. In terms of the environments in which they occur it can be seen that a long vowel is shortened before two consonants and one following weakly stressed syllable or before one consonant and two following weakly stressed syllables, and that in each case the immediately following syllable must begin with a consonant. Therefore the changes can be characterized in a unitary fashion, approximately as follows:

$$V \Rightarrow [-\text{long}] / \text{_____ } C\langle C \rangle_a \text{ } [C \dots]_a \langle [\dots] \rangle_b$$

Condition: either a or b.

(c) *Vowel lengthening*

5.202 In apparent contrast to the changes discussed in (b), during the OE period short vowels became lengthened when followed by liquid or nasal + homorganic voiced consonant, that is, *ld*, *rd*, *rl*, *rn*, *rð*, *rs*,¹ *mb*, *nd*, *ng*. Thus we find examples such as *gold* > *gôld*.² However, this can be seen as part of the same tendency to equalize the lengths of stress feet, in this case by the lengthening of short stressed syllables, see §5.198. For this to be the case it must be assumed that such consonant clusters had a special status in syllable structure, in that their behaviour was more akin to that of a single consonant than that of a bimoric cluster.³ This vowel lengthening, although presumably widespread, is not shown in the orthography, where vowel length is not regularly indicated, see §§2.4–5, and must be deduced from its interaction with other OE sound changes and the fact that in eME vowels in these circumstances behave as long vowels.

¹ The fricative in *rs*, *rð* clusters would only be voiced in OE when a voiced segment immediately followed, hence voiceless with unlengthened preceding vowel in *fers* 'verse', but voiced with lengthened preceding vowel in *ēarsas* 'buttocks'.

² I indicate long vowels due to this process by a circumflex to distinguish them from etymologically long vowels.

³ Evidence in support of this position comes from ME changes such as the loss of certain voiced stops after a preceding resonant, such as in *lamb*, and also from the phonotactics of PDE syllables, see, for example, Hogg and McCully (1987: 45–7).

5.203 A typical example of this change is *cild* > *ċild* 'child', and hence similarly *hēard* 'hard', *ċeorl* 'churl', *bēarn* 'child', *ēorðe* 'earth', *wýrsa* 'worse', *climban* 'climb', *bīndan* 'bind', *lāng* 'long'. As the account in §5.202 implies, the change did not take place in weakly stressed words, such as *sceolde* 'should', *and* 'and'. Furthermore, the change seems not to have taken place, in OE at least, in many words where it might have been expected. Thus we find LWS *wurd* 'word', *swurd* 'sword', *wurðian* 'honour', forms which only developed where the vowel was short, see §§5.183–6. In contrast note the failure of *seld* 'seat' to develop to **syld*, which is best explained by the assumption of *sēld*, see §5.171n2.

5.204 This sound change gave rise to a considerable degree of variation in words where a third consonant would directly follow the homorganic cluster in inflected forms, for in such cases the change was prevented. Thus we find *cildru* 'children' alongside *ċild*, and so in many other cases. This variation seems often to have been levelled away in favour of the short vowel, as ME developments testify. The levelling away of the long vowel was no doubt in part favoured because the sound change seems never to have been fully implemented, at least before groups, see Jordan (1974: §22).

(d) Summary

5.205 The changes described in (a) above were undoubtedly due to syllable phonotactics which remained constant throughout the period, and hence they would occur whenever the appropriate situation arose. The other changes, however, were no doubt consequent upon shifting syllable phonotactics and are datable within the period. In the case of the vowel shortenings, examples such as *bremblas* and *endemes* do not necessarily prove that the shortening took place before the time of *i*-umlaut, but they must have taken place before raising of /æ/ before nasals, see §§5.78(2), 5.79(1). Further, the examples cited in §5.200n1 show that the shortening must have occurred before the time of back umlaut and similarly or later dated changes. We may therefore conclude that vowel shortening was already operative by the time of the earliest texts. The somewhat sporadic nature of vowel lengthening, together with the absence of orthographic

evidence, makes the dating of that change rather more difficult. But the presence of back umlaut in Nbr *behionda* ‘behind’, Kt *siondan* ‘they are’, and the development of /æ/ > /e/ before a nasal in, for example, *sendan* ‘send’, as against the failure of *sêld* to develop to ***syld*, would imply that the change is probably to be dated c.ninth century, see further Bülbring (1900a: 87–9; 1902: §205A2).

XIX Monophthongization of diphthongs

5.206 In this section two quite different processes of monophthongization are discussed. Firstly, in §§5.207–9, I discuss a process of monophthongization due to shift in prominence which is occasionally seen in some LWS and INbr texts. Secondly, in §§5.210–14, I discuss the even later process of monophthongization which can be seen as the beginnings of the eME tendency for all OE diphthongs to be lost.

5.207 In both LWS and INbr there are a few scattered forms which seem to indicate that a shift in prominence could occur so that the second element of a diphthong was the more prominent, so leading to a monophthongization via loss of the first element. In LWS the forms most often involve a preceding palatal consonant, either /ʃ/ or /j/, for example, *scāwian* ‘observe’ < *scēawian*, *onġān* ‘against’ < *onġēan*. Interestingly, there are also a few forms involving preceding /s/, which may be further evidence in favour of a prepalatal allophone of /s/, hence *sufon* < *seofon*, see further §§2.62, 5.171n2, and the change is usually restricted to examples after /s/ in INbr.

5.208 Examples in LWS of the above change include: ÆCHom *scāwie*, *scāwiad*, forms of *scāwian*, PsGl(I) 72.4 *scāwung*, occasional, not Ælfric, *sufon*, ÆCHom II 223.62 *onġān*, WSB † *sufoda* ‘seventh’, see for the forms after /s/ Brunner (1965: §125A1). In INbr the principal examples are all after /s/, hence Ru2 *solf* ‘self’ < *seolf*, Li, Ru2 *sodða* ‘afterwards’ < *siodða*, see §5.107, Li, DurRitGl *sulfer*, cf. Li *seulfres* gen.sg. Additional examples are DurRitGl 197.8 † *fouer* ‘four’ < *fēower*, 24.8 † *ġitrōwalice* ‘faithfully’ < *-trēow-*, see Lindelöf (1890: 43). These latter forms not after /s/ are, however, scarcely trustworthy.

5.209 Further evidence for the above change is found in some late texts where the spellings ⟨geo, gea⟩ and ⟨eo, ea⟩ have become confused initially. Thus we find Brun 9(D) † *ġealgodon* ‘they defended’ for *ealgodon*, BenRW 42.6 *ġearfoðe* ‘difficult’ for *earfoðe*, RecCGI 11.22 *ġeornustlice* ‘therefore’ for *eornustlice*, Ch 1467.1 *aġiode* ‘happened’ for *aēode*, and, with loss of

⟨g⟩, WaldA 25 † *ēoc* ‘help’ for *ġēoc*, And 1625 *eador* ‘together’ for *geador* (with initial /y/ or /g/).

5.210 Towards the end of the OE period the diphthongs /ēō, eo/ and /æǣ, æa/¹ became monophthongs in almost all dialects, the only exception being Kt, where the long diphthongs underwent a separate development, see §5.213. In the case of /ēō, eo/ the monophthongization was to /ø(:)/, as is confirmed by the Anglo-Norman influenced spellings ⟨ue, oe, o⟩ in eME. The implication of this is that the change was caused by the loss of the second, less prominent, element of the diphthong (thus contrasting strongly with the change discussed in §§2.207–9), but that in the process of that loss the feature of rounding was transferred to the first element. In the case of /æǣ, æa/ the monophthongization was straightforwardly to /æ(:)/, by loss of the second element. The change is very poorly represented in OE texts, partly no doubt because of the conservative influence of the *Schriftsprache*. But it would also be the case that ⟨eo⟩ could be used equally well for /ø(:)/ and for /ēō, eo/, since usually no phonemic merger or split is caused by the change and in the standard language earlier /ø(:)/ from *i*-umlaut, represented by ⟨oe⟩, had long been lost. Shortly after the monophthongization of /æǣ, æa/ the short phoneme participated in the merger of /æ/ and /a/, see §5.215–16. The monophthongization of these diphthongs may be approximately characterized as follows:

$$\begin{bmatrix} \text{V} \\ +\text{syll} \end{bmatrix} \begin{bmatrix} \text{V} \\ \alpha\text{rnd} \end{bmatrix} \Rightarrow \begin{bmatrix} \text{V} \\ \alpha\text{rnd} \end{bmatrix} \quad \emptyset$$

¹ By this time the /iö, io/ diphthongs which had been retained in Nbr up to the time of LiGl, see §5.159, must have merged with /ēō, eo/, see Ekwall (1923: 199).

5.211 The monophthongization of /ēō, eo/ is scarcely represented in texts until the very end of the period.¹ Even in texts written *c.*1100, such as Ps(K), the usual spelling is ⟨eo⟩, but there are a number of ⟨e⟩ spellings, such as *hera* ‘their’ (frequently), *erþan* ‘earth’ infl. (2×), 67.34 *hefenas* (beside *heofena*), 148.14 *heuenan* ‘heaven’ dat.pl., *werc* ‘work’ and forms (4×), *þēwa* ‘servant’ and forms (5×), *ġēmerung* (< **ġēomrung*)² ‘moaning’ (5×), *betwēnan* ‘between’ (2×), *þēda* ‘people’ (2×), and many single examples of other words. Rather less frequently there occur ⟨o⟩ spellings, as in *stōran* ‘stars’ (2×), 95.11 *hofenas*, 105.20 *hora*, 103.6 *dōþnes* ‘deepness’. For further examples from this and other texts see C. Sisam and Sisam (1959: §62). The spelling variations no doubt reflect uncertainty over the most proper representation of the new sound, and preference for ⟨e⟩ over ⟨o⟩ need not be taken to imply monophthongization to /e(:)/. In the first half of the eleventh century such ⟨e⟩ spellings are found on coins with some

frequency, see for discussion Colman (1984: 122), so that their generally later appearance in mss. is most probably due to the persistence of orthographic convention.

¹ Apparent examples from much earlier texts are undoubtedly due to scribal error, for example, PsGl(A) 27.3 *hortum* ‘heart’ dat.pl.

² The form is difficult, for *geōmrung* normally has a rising diphthong due to palatal diphthongization of */o:/, see §§5.59–60, hence ME *zomer* ‘misery’. It seems likely that the form is due to a sporadic shift of prominence to the first element.

5.212 The monophthongization of /æ̃ɑ, æɑ/ is scarcely represented in texts dating from the beginning of the eleventh century and examples such as ÆCHom II 9 74.75 *ælle* ‘all’ are sporadic in the most reliable WS mss., see, however, Schlemilch (1914) for further details.¹ Parallel to the monophthongization of /ẽo, eo/, ⟨æ⟩ spellings for the monophthongized diphthong are found on coins of the first half of the the eleventh century, see further Colman (1984: 121–3). In later texts ⟨æ⟩ spellings become much more frequent, as exemplified in Ps(K) *ælle* ‘all’ (7×), *þærfan* ‘pauper’ (12×), *hæfod*, *hæuod* ‘head’ (9×) and other words. Notably, the same text also has occasional inverted spellings of ⟨ea⟩ for *æ*, such as 106.35 *weatera* ‘water’ gen.pl., 118.133 *ēaniz* ‘any’, 121.3 *dēalnimende* ‘taking part’.²

¹ Occasional Nbr forms such as Li *towærd*, Li, Ru1 *ðærf*, *þærf*, Ru2 *nēdðærfe* may show the change already beginning in Nbr dialects by the end of the tenth century.

² In Ps(K), as in some other texts, see Luick (1914–40: §279), also C. Sisam and Sisam (1959: §61), there is a tendency for *ēa* which is the result of palatal diphthongization to monophthongize to /e(:)/ rather than /æ(:)/, as exemplified by a number of ⟨e⟩ spellings, such as *cestra* ‘city’ (2×). This may indicate that the first element of the diphthong due to palatal diphthongization was higher than [æ], see §5.49.

5.213 In contrast to the situation in other dialects, in Kt the long diphthongs /eo, æɑ/ do not monophthongize. ME evidence shows that this was because in Kt long diphthongs prominence tended to shift from the first element to the second, so that they became rising, or at least level-stress, diphthongs, see Jordan (1974: §82 and references). There is also some evidence to show that the Kt short diphthongs could be similarly affected, see Kuhn and Quirk (1953: 50) and references therein.

5.214 Although the evidence from eleventh- and twelfth-century texts would imply that monophthongization only began to be fully implemented in the second half of the eleventh century, this may well be misleading, since established orthographic conventions would inhibit the scribal recognition of the change, see Luick (1914–40: §355). Furthermore, in the case of /ẽo, eo/ there was no phonological necessity for the recognition of the change, see §5.211. In this context, therefore, the existence of spellings on

coins indicating monophthongs and the sporadic occurrence of such spellings elsewhere assume particular importance, and perhaps point to a date *c.*1000 for monophthongization. In any case the shift of /æ̃ɑ/ > /æ/ must precede the merger of /æ/ and /ɑ/, which may be a mid eleventh-century change, see §5.216 below. Furthermore, since it seems probable that the shift of *weor* > *wur* involved a stage through [ø], see §5.183, and since that change belongs to the tenth century, see §5.187, this might be taken to imply that /eo/, at least, was already being monophthongized well before 1000.

XX Merger of /æ/ and /ɑ/

5.215 For almost all of the OE period there were two low short vowel phonemes, namely /æ/ and /ɑ/,¹ although the phonemic contrast may have been marginal, see §2.13 and references. At the end of the period, however, these two phonemes merged. The phonetic quality of the merged sound is difficult to determine, see esp. Lass (1976: 105–34), but phonemically it may be safest simply to interpret it as a low vowel, that is, /ɑ/, not further specified as front or back.

¹ Naturally this is not the position in Kt after the operation of æ-raising, see §§5.189–91, and the position in second fronting dialects was more complex, see §§5.87–92.

5.216 Although ⟨a⟩ spellings for earlier æ or æ < ea do not start to appear until *c.*1100¹ in mss., such spellings do occur on coins during the reign of Edward the Confessor, and not simply before back vowels, cf. Campbell (1959: §329.3n2). Thus we find † *Alfsie*, cited in Colman (1984: 121). This may, as Colman argues, be evidence that the merger had begun before the time of the Conquest.

¹ Thus Ps(K) has only a very few examples of such ⟨a⟩ spellings, for example, 108.9 *barn* ‘children’, 138.10 *halt* ‘it shall hold’.

Unstressed vowels

6.1 The most plausible reconstruction of the vowel system of unstressed syllables at the beginning of the OE period would suggest the following short vowels: */i, e, a, u/, and the following long vowels: */i:, æ:, u:, o:/. The long vowels were the result of either over-long vowels or diphthongs in Gmc, see Chapter 3 for this and other details of the development of unstressed vowels in Gmc, also §6.27 and n1. The existence of long vowels in unstressed syllables at this time suggests that the effects of the earlier Gmc stress system remained at least to some extent, although diphthongs could no longer appear in unstressed syllables, see §3.33 and also §6.27(4). The most important features of the development of unstressed vowels in OE are the reduction in length (VV > V, V > Ø) of such vowels, and the reduction in the number of contrasts in the system. However, unstressed vowels, early in OE, also participated in a number of sound changes which affected stressed vowels, particularly first fronting and associated changes.

I First fronting and associated changes

6.2 The first fronting of unstressed */a/ in general proceeded similarly to that of its stressed counterpart. The principal inflexional forms where fronting of */a/ took place were: (1) nom.sg. of weak fem. and neut. nouns, such as *tunge* ‘tongue’ < **tungæ* < **tunga* < **tungōn*; (2) past ind.sg. of weak verbs, such as *fremede* ‘I performed’ < **framidæ* < **framida* < **framidōm*; (3) gen.sg. of *a*-stem nouns, such as *stānes* ‘stone’ < **stānæs* < **stānas* < **stainas*. Outside inflexions the change is seen with the suffix *-ig* < *-eġ* < *-æġ* < **-ag*, for example, *hālīg* ‘holy’, *manīg* ‘many’.^{1,2} Since in unstressed syllables a following intervocalic nasal would belong uniquely to the following syllable, see §2.81, first fronting would proceed unhindered in such cases. Thus disyllabic nouns and adjectives such as *fæġen* ‘glad’, *mæġen* ‘might’,

þēoden ‘prince’ have *-en* from inflected forms such as pl. *þēodenas* < **þēodænōs* < **þēodanōs*.³ Particularly frequent parallel examples are found in the past parts. of strong verbs, such as *riden* ‘ridden’.⁴

¹ The stage immediately after first fronting is seen in EpGl *hunaeg* (2×) ‘honey’, 824 (also CorpGl 1621) *popaeg* ‘poppy’.

² Gmc */a:/ in unstressed syllables normally underwent the same development to /æ:/, Angl /e:/ as in stressed syllables, see §§3.22–5. After the period of first fronting, etc., however, it was shortened, see §6.28. It is possible that *frætwe* ‘ornament’, *geatwe* ‘armour’ (beside *getawa*) show early shortening to */a/ with development as above followed by syncope, but see §2.91n4.

³ Similarly CædH(M) 1 *hefaen-* ‘heaven’ alongside the more usual *heofon*.

⁴ EpGl, ErfGl regularly have *-æn*, for example, 814 *forslaegæn* ‘struck down’, alongside other forms with *-in* < IE *-en*, such as 744 *forsleginum*. But CorpGl does not have such forms with the possible exception of 918 *afigaen* ‘fried’. For discussion of this form see Wynn (1956: 111–12) and references.

6.3 When */a/ was followed by a tautosyllabic nasal, then, as with stressed */a/, see §§5.3–6, it would appear that the vowel was nasalized at a time prior to first fronting and that this nasalization prevented fronting from taking place. It is notable, however, that the forms involved are regularly spelled with <a>,¹ contrasting with the stressed vowel development, and this implies that the normal development in unstressed was merely to /a/. Typical examples are found in the infinitive of verbs, the nom.pl. and other inflexions of weak nouns, and parallel inflexions of weak adjectives, such as *helpan* ‘help’, *guman* ‘men’, *blindan* ‘blind’.

¹ For words with <o>, see §6.4.

6.4 Several groups of words show developments which are exceptional with regard to §§6.2–3. These exceptions are exemplified in subsections (1) and (2) below, and the phenomena are discussed in (3) below.

- (1) A number of words demonstrate apparent failure of first fronting with */a/ not before a nasal. The words fall into three groups: (a) non-lexical items or forms of the copula *wesan*; (b) the originally secondary-stressed elements of obscured compounds or prefixed nouns; (c) unstressed verbal prefixes. Instances of each of these are: (a) *ac* ‘but’, *hwa* ‘who’, *swa* ‘so’,¹ *was* ‘was’, alongside much more frequent *wæs*, *nas* ‘wasn’t’, very rare alongside usual *næs*; (b) *and-*, *ondsworu* ‘answer’,² *here-pað*, *poð* ‘main road’, *sīpfat* ‘journey’, occasionally alongside *sīpfæt*; (c) *of-*, *ot-*, unstressed variants of *æf-*, *æt*, see §2.88. As can be seen, in such instances the usual spelling of the vowel is <a>, but otherwise less frequent <o> is normal in unstressed prefixes.

- (2) In some words where Gmc */a/ stands before a nasal the development is to a form normally spelled ⟨o⟩ rather than ⟨a⟩. These words fall into two groups, cf. above: (a) non-lexical items; (b) the secondary-stressed elements of compounds or prefixed nouns. Instances of the first group are: *hwone* ‘who’ acc.sg., *hwon* instr.sg., *þone* ‘that’ acc.sg., *þon* instr.sg., *on* ‘on’, *hwonne* ‘when’, *hwonon* ‘whence’. Except in the case of *hwonon*, where the more frequent form is *hwanon*, spellings with ⟨a⟩ are rare. In the second group there is often a further development to ⟨u⟩, hence: *ācumba* ‘oakum’, *æſþunca* ‘offence’ (more frequently *æſþanca*, *æſþonca*), *furlung* ‘furlong’ (more frequently *furlang*, occasionally *furlong*),³ *licuma* ‘body’ (occasionally, beside usual *lichama*, *lichoma*).
- (3) It would seem certain that the changes described in (1) and (2) are largely parallel. Nevertheless, both the environments in which they occur and the developments which are reflected by the spellings are problematical. Concerning the environment, it is clear that the changes take place neither in primary-stressed syllables nor in wholly unstressed syllables. The latter point is made clear by the behaviour of Gmc */a/ in unstressed inflexional endings, such as *tunge* ‘tongue’, *guman* ‘men’. Rather, the changes appear to be restricted to syllables which either formerly bore secondary stress or are the more heavily stressed syllables of non-lexical items. There appears to be no non-arbitrary method of satisfactorily describing this situation. For the sake of convenience the term ‘tertiary stress’ appears to be the most convenient.⁴ In terms of the actual developments, the regularity of ⟨o⟩ spellings for Gmc */a/ + nasal would suggest that here the development was to /o/, rather than to [a] or [ɒ] as in fully stressed syllables, see §5.3, although it is likely that there would have been an intermediate stage */a/, see §6.7. This would seem to be confirmed by the ⟨u⟩ spellings exemplified above, which would allow the possibility of further raising to /u/ in tertiary-stressed position. For the examples of Gmc */a/ not followed by a nasal, the ⟨a⟩ spellings are most obviously interpreted as representations of /a/ with the possibility of raising to /o/ under obscure conditions.

¹ *Swǣ* is not found in Ælfric and is generally more common in EWS than in LWS. It is to be derived from Gmc stressed **swā* > *swǣ*, with shortening in positions of reduced stress. The parallel forms in Angl are *swǣ*, cf. CædH, Ps(A) *swē*. Similar forms are not found for *hwa*. The alternative Nbr form *swǣ* is not explicable in the above terms and remains difficult, see further §3.25n3.

² *And-*, *ondswaru* is of course ambiguous between the present development and restoration of *a* before a back vowel.

³ But not *sīlung* ‘Kt measure of land’, which cannot be from *sīlb+lang*, since ***sīllung* does not occur, nor do forms with *a*, and forms with *o* are rare, see Campbell (1959: §333n1).

⁴ This is not to imply that tertiary stress actually existed as a phonological phenomenon in OE. The term is merely a convenience to describe a group whose stress status is obscure.

6.5 The development of the Gmc diphthong */ai/ in secondary-stressed syllables could parallel the development in primary-stressed syllables, that is, */ai/ > /a:/, hence forms such as *-stān*, for example, *cweornstān* ‘millstone’, and many similar forms. But this /a:/, and also examples of /a:/: from Inguaeonic loss of nasal, such as **orāþ* ‘breath’ < **oranþ*, could then be subject to shortening to */a/ if the secondary stress was weakened. Consequently, in line with the developments of §6.4(1), both ⟨a⟩ and ⟨o⟩ spellings are found, but in these cases the latter greatly predominate, for example, *eofot* ‘crime’, cf. EpGl 854 *ebhatis*, *earfoþ* ‘trouble’, cf. Mart 5.1280 *earfab-*, *ēorod* ‘troop’, cf. AldV 1.377 *ēorada*, *wulmod* ‘distaff’.^{1,2} The only certain example due to Inguaeonic loss of nasal is *orūþ*, alongside *orāþ*, see above.

¹ Further possible forms are *bēot* ‘boast’ < **bi-bat*, see §5.124n4, and *innof*, *innaf* ‘the inside (of the body)’. But the former shows diphthongization due to hiatus resolution, where the normal result is /eo/, see §5.136, and the latter is preferably to be derived from earlier **innof-*, with ⟨a⟩-spellings due to late confusion of unstressed vowels.

² For alternative developments of *earfoþ*, *ēorod*, see §6.29.

6.6 It is only reasonable to assume that, where first fronting and other changes associated with stressed syllables took place also in unstressed syllables, the chronology of the changes was the same in both types of syllable. The exceptional developments discussed in §§6.4–5, however, appear to have been rather later, for they are more common in late texts than in early ones. Furthermore, they are in part dependent upon shifts such as the obscuration of compounds and the subsequent weakening of stress. For further evidence that they belong to a later, if uncertainly dated, period, see the discussion of breaking in §6.7.

II Breaking, palatal diphthongization, *i*-umlaut, and back umlaut

6.7 As stated in §6.1, diphthongs did not occur in unstressed syllables in OE. Consequently, the development of diphthongs by breaking which occurred in stressed syllables was not paralleled in unstressed syllables.¹ The principal relevant examples concern the breaking of */æ/, which in unstressed syllables was retracted to /a/ rather than diphthongized. The usual environment for the retraction was ‘tertiary’ stress (see §6.4 and n3), that is, in the second element of obscured compounds or in the initial syllable of function words. Examples of the first type are: *hlāfard* ‘lord’, *andward* ‘present’, *toward* ‘towards’, Ch 1197.20 *wiaralde* ‘world’, and many second elements of proper names, as in *Æðelbald*, etc.² Examples of

the second type are *nalles* ‘not at all’ (< **ne+alles*, see 5.152), WSCp *art* ‘thou art’ (3×), CP 203.15 *ðarf* ‘thou needest’, but these vary with stressed forms, that is, *nealles*, and the more usual *eart*, *þearf*.³ Since the relevant environment is ‘tertiary’ stress, this /a/, which is likely to have merged with the sound developed from Gmc */a/ + nasal in the same stress environment, see §6.4, is then subject to raising to /o/, hence the usual *hlāford*, *weorold*, *efolsiga*, and very occasional *toword*. Sometimes there is further raising to /u/, hence occasional LWS *hlāfurd*, also at MtGl(Li) 2.28, frequent *weoruld*, and in Ru2 forms of *eofulsiga*.

¹ Because secondary stress is regularly retained in inflected forms, see §2.89, giving, for example, *andweardan*, the diphthong of inflected forms could then be transferred, presumably with secondary stress also, to uninflected forms, giving frequent *andweard*, similarly *toward*. The phonological reflex of the analogy is found in forms such as frequent *andwerd*, *towerd*, with monophthongization of the analogical diphthong. For LiGl *tōward*, however, see §5.212n1. The same diphthongal forms are often found with proper names also, such as *Beornheard*, where the spelling may be a reflection of etymology. PPs 104.17 *hlāfwearde* is most probably due to diphthongization in secondary-stressed syllables, as above, rather than to the retention of compound stress.

² It is not possible to distinguish the development in Nbr *efalsiga* ‘blaspheme’ from normal Angl retraction, cf. Angl *halsian*, WS *healsian*, but loss of /h/ shows that the syllable does not have secondary stress. Similarly EWS *onwald* ‘authority’ could either be due to the present developments or be a characteristic EWS form deriving from the so-called *a*-dialect, see §5.15 and n2. Its relatively high frequency alongside *onweald* might be due to a combination of the two factors, if it is not to be treated as a lexically idiosyncratic phenomenon, see §5.15n2 and references.

³ Nbr *arð* ‘thou art’ cannot be explained by combinative breaking, see §5.29, and should therefore, perhaps, be treated in parallel with WS *art*. But its frequency is striking, and thus ought to be related to the Nbr instances of retraction in stressed syllables.

6.8 Examples where unstressed */i/ was in an environment for breaking are largely restricted to instances with a preceding /w/, and here there appear to have been two possible developments. Firstly, the /i/ might remain, hence *fulwiht* ‘baptism’, *nāwiht* ‘nothing’. Secondly the preceding /w/ might cause retraction to /u/, hence alternative forms such as *nāmwuht*, *fulluht* (also with loss of /w/ in an unstressed syllable), *betwuh*, *betwux* ‘between’.¹

¹ The suggestion by Bülbring (1902: §422), Campbell (1959: §338n1) that eKt Ch 1200.20 † *Cīalbarbt* is a genuine development from *-beorbt* seems unlikely. It is more probably an error for *-biarbt*, *-bearbt*.

6.9 Even in WS there is no sign of palatal diphthongization of front vowels in unstressed positions. In EWS especially, when a palatal consonant occurs before an unstressed back vowel, spellings such as *sēcean* ‘seek’ occur alongside *sēcan*, but these must be regarded as diacritical to signify

the palatal consonant. This is confirmed by the relative rarity of such spellings in LWS. For further discussion see §2.68.

6.10 The operation of *i*-umlaut in unstressed syllables appears in principle to have been parallel to that in stressed syllables. However, the front rounded vowels /y(:), ø(:)/ were unrounded at some very early prehistoric stage, developing eventually as /e/.¹ In all cases shortening would occur regularly, see §6.28. Typical examples of *i*-umlaut in unstressed syllables are as follows:

- (1) */u/: *ufumist > yfemest ‘upmost’, *gaduling > gædeling ‘companion’, and many similar forms. All such forms also show *i*-umlaut of the preceding stressed vowel, and that umlaut presumably occurred at the same time. For further discussion and examples see §5.76.
- (2) */o/:² the most widespread examples involve the *-oj- formative of the present tense of weak class 2 verbs, which develops > *-ej- > *-ij- > -i-, hence *lufian* ‘love’ and other verbs of the same class. Other examples involve the suffix *-ōdi, as in *hōcede* ‘hooked’, *hringede* ‘ringed’, or the suffix *-rōni (> *-rēni > *-rene > -erne by metathesis), as in *sūþerne* ‘southern’.
- (3) */a/: examples involve the pres.part. ending *-ende* (< *-andi) and the infl.inf. *-enne* (< *-anjai).³ As with the same change in stressed syllables, the spelling ⟨æ⟩ can be found, especially here in Nbr and Ru1. For discussion see §5.78(1).
- (4) */æ/: the most frequent examples involve the suffixes *-estre*, *-ettan* (< *-astri, *-attjan*), for example, *sēamestre* ‘seamstress’, *hlēapettan* ‘leap’. But examples are also found in polysyllabic forms, such as *æþele* ‘noble’, where the vowel is often syncopated, as in *mægden* ‘maiden’ < *magadin, see §6.15.⁴

¹ Presumably the unrounding of */y/ was in the first instance to */i/, with later lowering to /e/, see §6.50n2.

² For *i*-umlaut of */o/ the form *stānehtan* ‘stony’ is often cited, but this is more probably from *stāniht* with exceptional lowering of /i/, see §6.51. However, EpGl 166 *clibecti* ‘steep’, cf. *clifht*, is probably a genuine example, see Luick (1914–40: §302.2).

³ The form *-ande*, frequent in WS and Nbr, absent only in Ps(A) and CollGl 49 of the major texts, is due to the uninflected inf. *-an*, and NNbr *-ande*, frequent in weak class 2, occasionally elsewhere, is similarly analogical. Note also Ru2 *gangande* ‘going’ and a few other forms.

⁴ In the case of *hægtess* ‘witch’ < *bagatussi medial /æ/ was subject to iterative umlaut. Note that it must be assumed that the medial vowel was subject to first fronting, no doubt because the following back vowel was at that time in a different stress foot.

6.11 Since diphthongs could not occur in unstressed syllables, back umlaut is normally absent from such environments. However, back umlaut could occur in secondary-stressed syllables, examples being: *endleofan* ‘eleven’,

the Kt Ch 1482.10 *geornliocar* ‘more eagerly’, Lch II *sciptearo* (5×) ‘pitch’ (< *-*teoro*, see §5.42 and n1),¹ *-tiogoþa*, *-teogoþa* ‘-tieth’, Ps(A) *ondwleota* (frequent), MtGl(Ru1) *ondwliota*, *-u* (6×) ‘face’. When secondary stress is lost, the diphthong may be simplified either as the original vowel or as the nearest corresponding back vowel. Examples of the former are: *endlifan*, *-licor* (also *-licost* without diphthongized forms), *-tiogoþa*. Examples of the latter are: *endlufon*, *ondwlata*, *sciptara*, rare *-lucor*, *-lucost*, *-togoþa*.²

¹ But *-teara* could be due to analogical extension of breaking, see §5.22n3. If so, it should be taken under §6.7n1.

² *Ærendraca* ‘messenger’, *wiðerbraca* ‘adversary’ are different formations alongside *ærendwreca*, *wiðerbreca*.

6.12 It can reasonably be assumed, in the absence of evidence to the contrary, that the principal changes described in this section occurred at the same time as the parallel changes in stressed syllables. Where these changes resulted in a diphthong in a secondary-stressed syllable which was later to become unstressed, the monophthongization may be presumed to be contemporaneous with the stress reduction.

III Syncope and apocope

6.13 In OE vowels in unstressed syllables were at various times subject to general processes of reduction in length. The normal consequence of such processes was that the length of unstressed vowels was reduced by one mora, so that short vowels were lost and long vowels became short vowels. In this section we deal with the various losses of short vowels in the earliest periods, whilst in section IV we deal with the early shortenings of long vowels. The two processes must be seen, however, as phonologically parallel.

6.14 In all medial unstressed syllables the nonhigh vowels /e, æ, a/¹ were subject to syncope in all environments except where the syllable was closed. Thus nonhigh vowel syncope occurs both after heavy syllables, as in *þēodnes* ‘prince’ gen.sg. < **þēodænæs*, and after light syllables, as in *awles* ‘hook’ gen.sg. < **awælæs*. Equally, the change affects both unumlauted vowels, as in the above examples, and umlauted vowels, for example, *mægden* ‘maiden’ < **magatin*, provided that the result of umlaut is a non-high vowel. Examples of failure of syncope in closed syllables are seen with the suffixes *-estre*, *-ettan*, for examples see §6.10(4).² For discussion of the chronology of this change relative to *i*-umlaut, see §6.17 below.³

¹ At the time of syncope Gmc */o/ had already lowered to /a/, see §6.28, and hence no examples of /o/ occurred in the environment for syncope.

² Syncope does not occur in *bedecian* ‘beg’, perhaps because an unacceptable medial consonant cluster would result, see Luick (1914–40: §303A1).

³ The syncope which affects *lel* < **li*l, as in *yfles* ‘evil’ gen.sg. of *yfel*, is of a later date, see §6.67.

6.15 Examples of nonhigh vowel syncope are found in a variety of forms, but most frequently in inflected or derived forms of bisyllabic words characteristically ending in *-en* (including the past part. suffix), *-el*, *-er*, *-eġ* (later *-iġ*). All such forms are from earlier **-æn*, etc., which may demonstrate the shape of the vowel at the time of syncope, and typical examples are: *awles*, *fægnes*, *halġes*, *lifre*, *mægnes*, *ōpres*, all gen.sg. of *awel* ‘hook’, *fæġen* ‘happy’, *hālīġ* (< *hālēġ*) ‘holy’, *lifēr* ‘liver’, *mæġen* ‘might’, *ōþer* ‘other’; *ġebundne*, *ġeworþne*, masc.acc.sg. of past parts. *ġebunden* ‘bound’, *ġeworþen* ‘thrown’; *fæġnian* ‘rejoice’ < *fæġen*, *opnian* ‘open’ < *open*. In compounds where the first element is an *a*-stem noun, the thematic *-a-* is lost, for example, *ælmihitiġ* ‘almighty’, *dæġliċ* ‘daily’.¹ Examples can also be seen with the suffix *-þa* < **-apō*, for example, *sceaþþa* ‘shaving’, *spiwþa* ‘vomit’, but these forms exist alongside forms such as *sceafoþa*, *spiweþa*, from the alternative formations **-uþā*, **-iþā*. The syncope is also found in the acc.sg.masc. of strong adjectives, such as *gōdne* ‘good’ < **gōdanōn*.² A further type is the regular comparative as in *glēawra* ‘wiser’, *blindra* ‘more blind’, *hwætra* ‘more active’, *hālīgra* ‘holier’, where the Gmc suffix **-ōra* was subject to early shortening to **/o/* and then developed regularly to */a/*. Examples where an *i*-umlauted vowel suffers syncope are: *hæġtess* ‘witch’ < **hæġetyssi*, *lāwriċe* ‘lark’ < **lāweriċe* ‘lark’, *mæġden* ‘maiden’, see §6.10(4) and n4. Amongst individual items with syncope are: *hätte* ‘is called’ < **hātædæ* with assimilation of */td/* > */tt/*, *hwæþre* ‘however’, cf. *ōpres* above, *sāwl* ‘soul’ < Gmc. **saiwalō*.³

¹ By analogy the syncope is then extended to compounds with *ō*-stem nouns in the first element, such as *ġifstōl* ‘gift-throne’. But in weak nouns such as *gumcynn* ‘human race’, *beortlēas* ‘dispirited’, the syncope is regular since the thematic vowel was nonhigh.

² It is also probable that the fem.gen./dat.sg. *-re* of strong adjectives belongs here, for example, *blindre* ‘blind’. If such forms are from **-aižōz*, **-aižai*, WGmc monophthongization to **/æ:/* must have been followed by very early shortening to */æ/*, since only syncopated forms are found, cf. nomina agentis such as *leornere* ‘learner’ without syncopation. Alternatively, the forms may be derived from **-ezōz*, **-ezai*, pronominal endings seen in the declension of OHG *dera*, *deru*, in which case syncope of */el/* is predictable.

³ Also to be taken here is *æxe* infl. form of *æx* ‘axe’ < **æcæsæ*, etc. which is extended to the nom.sg. Merc *acus*, *æcesum* dat.pl. are from the alternative form **acus-*, and Nbr *acas-* appears to be due to confusion of unstressed vowels, see Campbell (1959: §341n2).

6.16 Since syncope often occurs in the inflected forms of polysyllabic words, it naturally gives rise to many morphological alternations of the

type exemplified in §6.15. Consequently, the syncope is often levelled away, to give forms such as *aweles*, *haliġes*, etc.¹ Such levelling away is particularly frequent in the past part., hence *ġebundene*, *ġeworpene*, etc.

¹ Pope (1967–8: 184–5) notes that Ælfric manuscripts of the eleventh century regularly show syncope if the following inflexional vowel is back, hence *hālga*, *hālgan*, *hālgum*, but elsewhere the medial vowel is restored, hence *hālġre*, *hālġne*, *hālġra*, *hālġe*, *hālġes*. But, as he notes, it is possible that ⟨i⟩ is merely a diacritic to indicate /j/, see further §7.76n2.

6.17 Nonhigh vowel syncope must have occurred after the time of *i*-umlaut, for otherwise forms such as *mæġden* would have undergone umlaut of the stressed vowel (< **mæġdin*). On the other hand this syncope must have been earlier than lowering of unstressed /i/ > /e/, for such vowels are not lost if they are not in the environment for high vowel syncope. Typical examples are *cynedom* ‘kingdom’, and the past tenses of weak class 1 verbs, such as *nerede* ‘saved’.

6.18 The unstressed high vowels /i/ and /u/ were also subject to loss, although in a slightly different set of environments from that discussed in §§6.13–17. Medially /i/ and /u/ were subject to syncope in open syllables after a heavy syllable, for example, *hīrde* ‘heard’ < **hīridæ* < **hauzida*. Finally, /i/ and /u/ were subject to apocope in open syllables after either a heavy syllable or two light syllables, for example, *word* ‘words’ < **wordu*, *weorod* ‘troops’ < **weorodu*. After one light syllable only, however, /i, u/ remained both medially and finally, for example, *nerede* ‘saved’ < **neridæ*, *scīpu* ‘ships’, and the same was true if the vowel was preceded by a heavy and a light syllable, for example, *hēafdu* ‘heads’ < **hēafudu* with syncope rather than apocope. A coherent description of the environment for high vowel loss is difficult in purely segmental terms. However, if we assume that OE syllables were grouped into ‘rhythmemes’, and that rhythmemes contained maximally one heavy syllable or two light syllables, and that the head of the rhythmeme is the right-most node, it is possible to state the environment for the change as being an unstressed high vowel immediately preceded by the head of a rhythmeme.¹

¹ I owe the term ‘rhythmeme’ to Chris McCully, see McCully (1991) for further details and justification, especially in terms of OE metre and the phenomenon of resolution. The phonological analysis of the environment offered here is, however, largely based on Keyser and O’Neil (1985), who term the relevant processes ‘High Vowel Deletion’. It should, however, be pointed out that much else of their analysis is unacceptable as a diachronic account of OE.

6.19 High vowel syncope in an open syllable¹ after a heavy syllable is regularly found in a number of well-defined circumstances. Thus the

preterite of regular weak class 1 verbs, formed with medial /i/ followed by a dental suffix, would show syncope of that /i/ after a heavy syllable, for example, *hīrde* ‘heard’, *dēmdē* ‘judge’, and, with simplification of the consonant cluster, *sende* ‘sent’ < **sendidæ*.² There is no syncope after light syllables, for example, *nerede* ‘saved’, *fremede* ‘performed’.³ Syncope also occurs in the comparative of those adjectives which compare by means of *-*izō*, *-*ist*, and hence show *i*-umlaut. Typical examples include: *yldra* ‘older’ (< **ealdira*), *gīngra* ‘younger’, *lēngra* ‘longer’, *strengra* ‘stronger’ (alongside *strangra* < **strangara* with the regular comparative, see §6.15). Other examples of high vowel syncope also occur in similar circumstances to nonhigh vowel syncope. Thus the syncope is frequent in inflected forms of bisyllabic words, such as *engles*, *hēafdes*, *hēāþnes*, *lýtles*, all gen.sg. of *enġel* ‘angel’, *hēafod* ‘head’, *hēāþen* ‘heathen’, *lýtēl* ‘little’. Note especially *ālcēs* ‘each’ < **āliċ* with shortening of */i:/ before the time of syncope. Original *i*- and *u*-stem adjectives would have suffered high vowel syncope in the acc.sg.masc. exactly parallel to that of the *a*-stems (see §6.15), hence *blīþne* ‘happy’, *heardne* ‘hard’ < *-*inōn*, *-*unōn*, unless they had already transferred to the *a*-stems by the time of syncope. In personal names the diminutive *-*ika* is syncopated in LVD † *Brýnca*, † *Drēmca*, † *Hýnca*. However, there is no syncopation of the vowel in the suffix *-uc*, even in inflected forms, such as *bulluce* dat.sg. of *bulluc* ‘bullock’. The explanation of such forms is uncertain.

¹ As with nonhigh vowel syncope, the change does not usually occur in closed syllables, hence *cyninges*, *lēasunge*, *engliſcēs*, *stānihte*, other examples of the same suffixes in inflexion, and particularly the superlative forms of the adjectives cited below, such as *yldest* ‘oldest’. But especially with superlatives syncopated forms are often introduced analogically in LWS, see §6.24(2). Other examples of syncopation are usually rather late, such as *cyng* ‘king’, see §6.69.

² But where the heavy syllable ends in a consonant cluster with a final liquid, for example, *hyngrede* ‘hungered’, there is normally no syncope, hence *dīgledē* ‘concealed’, *frēfredē* ‘comforted’, *timbrede* ‘built’, *symbledē* ‘feasted’, *wrixledē* ‘exchanged’. The retention of the medial /e/ (</i/) appears to promote confusion with weak class 2 verbs, hence forms such as *hyngrode* develop and so present tense forms such as *hyngrīan*. In Nbr especially, however, the syncope appears to be permitted and hence a syllabic liquid occurs, giving rise to frequent forms of the type *hyngerde*, see further §6.41n3.

³ But the lack of medial /i/ in verbs of the *cwellan*–*cwealde* ‘kill’, *wyrċan*–*worhte* ‘work’ type is of Gmc origin, and unrelated to the present changes, see Prokosch (1927).

6.20 Apocope of /i, u/ occurs in absolute finality¹ immediately after the head of a rhythmeme (see §6.18 and n1) most commonly in a variety of inflected forms. Thus in *a*-stem neut.pl. we find forms of the type *word*, *weorod* against *fatu* ‘vessels’, *hēafodu* ‘heads’; in *ō*-stem nom.sg. we find *lār* ‘learning’, *netel* ‘nettle’, *ġeogup* ‘youth’, *ſcōtung* ‘shooting’² against *ġyfu* ‘gift’, *sāwl* ‘soul’ (see §6.15); in *i*-stem nom.sg. we find *dāel* ‘part’, *wyrm*

‘worm’; in *u*-stem nom.sg. we find *feld* ‘field’, *hand* ‘hand’, against *sun* ‘son’, *duru* ‘door’; similar to the above are *wa*- and *wō*-stems such as *þēow* ‘servant’, *lās* ‘pasture’, against *bearu* ‘grove’, *sinu* ‘sinew’; finally there are the nom.pl. of athematic nouns, such as *fēt* ‘feet’, *bēc* ‘books’, against *styde* ‘posts’. Amongst verbs apocope is seen in the imp. of weak class 1 verbs such as *dēm* ‘judge!’, *send* ‘send!’, against *freme* ‘perform!’, *here* ‘praise!’. Individual examples outside the above categories are: *twām* ‘two’ dat. < **twaimiz*, possibly **twaimuz*, similarly *þām* ‘them’.³ However, if final *i*, *u* is followed by a consonant, apocope does not occur, hence *gēlāded* ‘led’, *wæron* ‘were’ and many others, with *-ed*, *-on* for older *-id*, *-un*. See, however, §6.24(2).

¹ Hence apocope, like syncope, does not take place in closed syllables, for example, *wordum* ‘words’ dat. against *word* < *wordu*.

² In forms similar to *ścotung* but with the initial syllable heavy also, syncope occurs after two heavy syllables, for example, *lēasung* ‘falsehood’.

³ Probably also to be included here is Angl *milē* ‘milk’, alongside WS *meolc*. In order to account for the lack of back umlaut it must be assumed that the nom.sg. is extended from gen.dat.sg. forms such as **milyci* < **miluki*, with apocope of final *i* only at the same time as the apocope above. The WS form is from **meluk*. The syncope of **milyc* > *milc* is of later date, see §6.68.

6.21 Loss of a high vowel also regularly occurs medially in compounds after a heavy syllable, for example, *gīsthūs* ‘inn’, *hȳþscīp* ‘pirate ship’, *māedland* ‘meadow land’, *flōdweg* ‘sea’, *handseax* ‘dagger’. However, such loss seems to have been partially dependent upon the weight of the second element, and loss was less likely before a heavy syllable than before two light syllables, presumably for suprasegmental reasons. Hence we find *hilderinc* against *hildfruma* and other similar forms, note especially LVD † *Hildiburg* against † *Hilduini*. On the other hand, in proper names the loss is often extended to positions after light syllables, so that *Cyn-*, *Her-*, *Hyg-*, *Sig-*, *Bad-*, *Friþ-*, *Haþ-* occur alongside *Cyni-*, *Cyne-*, *Badu-*, etc.¹ Occasional parallel examples with common nouns include: Aug 1 *cwidbocan* ‘book of sayings’, Ch 1352 (2×) *hegstowe* ‘enclosure’ (also other compounds of *hege*), Ch 842.2 *herpaðes* ‘main road’, LkGl (Li, Ru2) *metbælig* ‘meat-bag’, PrudGl 1.1071 *metfæt* ‘dish’, Or 129.3 *metseacsum* ‘meat-knives’, EpGl 992, RuneBewcastle 2 *sigbēacn* ‘victory beacon’, usually alongside more frequent forms without loss, such as *herepað*.² In the prefix *el-*, *ele* ‘foreign’ loss of *i* greatly predominates, hence always *elþēodig* ‘strange’, cf. *eleland*, *elland* ‘foreign country’.

¹ But LWS *cynlic* ‘kingly’ for *cyneliē* is to be explained as a form from the nominative, paralleling other late *ja*-stem compounds such as *bedtid* ‘bedtime’, rather than by the variation outlined above. The variation *Selred*, *Selered* is due to the variation in the simplex, that is, *sel*, *sele* ‘hall’, thus also not by the variation above.

² But where the first element is an *ō*-stem noun, as in *carlēas* ‘careless’, *luftācen* ‘love-token’, *sceamfæst* ‘shamefaced’, the loss of /u/ is more probably due to the analogy discussed in §6.15n1. For other apparent exceptions see §6.31 and Campbell (1959: §348n2).

6.22 The internal chronology of the various syncope and apocopes discussed above is somewhat complex. However, forms such as *sāul* ‘soul’ < Gmc **saiwalō* must have developed with syncope of */a/ > **sāulu* and then apocope of */u/ > *sāul*, hence demonstrating that nonhigh vowel syncope was earlier than high vowel apocope. Further, **rīkiu* > **rīciu* > *rīcu* ≠ ***rīc*, demonstrates that high vowel syncope was not subsequently followed by high vowel apocope.¹ From this we must conclude that the internal ordering was: nonhigh vowel syncope – high vowel apocope – high vowel syncope. For an alternative account which permits the changes to be contemporaneous, see §6.25, and see also Luick (1914–40: §309).

¹ The statement by Campbell (1959: §353) that in forms such as **rīciu*, **hēofudu*, etc., where both medial and final high vowels ‘were in conditions demanding loss of the vowel, the middle syllable was the one affected’, is somewhat misleading. It should, however, be interpreted as claiming that where syncope occurs (> *rīcu*, *hēafdu*), apocope does not then occur even although the final vowel is in the relevant environment. This can be explained chronologically, as below, or on general phonological grounds, as in §6.25.

6.23 It has been noted in §6.17 that nonhigh vowel syncope must have occurred later than *i*-umlaut but earlier than lowering of unstressed /i/ > /e/. Forms such as *bēc* ‘books’, *yldra* ‘older’ equally demonstrate that high vowel apocope and syncope must both be later than *i*-umlaut (and palatalization). On the other hand, there is no necessity to suppose that these changes were later than the earliest texts. This might be supposed by a consideration of forms in hiatus where the hiatus is resolved by loss of the unstressed vowel, for example, **dē-ist* > *dēst* ‘thou dost’, see §§5.131ff. Although such forms bear a superficial resemblance to, for example, apocope in **sāi* > *sā* ‘sea’, where the earlier form is disyllabic, it is quite clear that the resolution of hiatus occurs in a wider range of environments, with respect both to the vowel which is lost, as in, for example, **scō-es* > *scōs* and to the fact that hiatus may be regularly be resolved even when the unstressed vowel is in a closed syllable, as in *dēst*, above, see §§6.19n1, 6.20n1.

6.24 Both syncope and apocope are major sources of morphological alternation, and perhaps in consequence both are subject to considerable analogical reformation. Such changes in connection with apocope are discussed under (1) below, with syncope under (2) below, and with both under (3) below.

- (1) The most prominent cases concerning apocope are in nWS, where 1sg.pr.ind. of verbs is usually *-u* (or *-o*, see §6.57). Theoretically this should result in a variation whereby the inflexion should be apocopated after a heavy syllable, that is, in strong verb classes I–III, VII, but preserved after a light syllable. But the apocope is levelled away in all cases, giving forms such as Merc *drīfu*, Nbr *drīfo* ‘I drive out’. The regularity of the change suggests this is a morphologically defined restriction on apocope, rather than simple analogy from short-stemmed forms such as *fearu*, *færo* ‘I go’. Other examples of levelling of apocope can be found in nom.acc.pl. of neuter strong nouns, where *-u* may be reintroduced after a heavy syllable. This is especially frequent after a syllabic consonant, hence developments of the type **tunglu* > *tungl* ‘stars’ show either epenthesis > *tungol* or restoration of *u* > *tunglu*. Similar forms are *tācnu* ‘tokens’, *wāpnū* ‘weapons’, *wundru* ‘wonders’.¹ Occasionally *-u* is extended to positions after two light syllables, hence WHom 6.22 (also in some other late texts) *weredu* ‘troops’. Elsewhere analogical forms are rare.²
- (2) Where /i/ or /u/ occurs in a final closed syllable, then vowel loss does not normally occur, see §6.20 and n1. However, in WS and Kt under WS influence, vowel loss does occur regularly in 2,3sg.pr.ind. of weak class 1 and strong verbs, hence *dēmst* ‘thou judgest’, *rītt* ‘he rides’, etc. (with consequent simplifications of the consonant clusters which arise, see §§7.77ff.). The change is further extended so that such vowel loss occurs after light syllables also, hence *birst* ‘thou carriest’, *cymb* ‘he comes’, etc. A similar type of analogical extension of syncope occurs in the WS superl. forms *gingsta* ‘youngest’, *hiehsta*, *hyhsta* ‘highest’, *lēsta* ‘least’, *lengst* ‘longest’ (LWS only), *strengsta* ‘strongest’, *wyrsta* ‘worst’, *ieldsta*, *yldsta* ‘oldest’, and thence are derived forms with zero inflexion, such as *gingst*. Somewhat different, however, is vowel loss in WS past parts. such as *gesend* ‘sent’. Here the syncope which is regular in inflected forms, such as *gesende*, see §6.19, is extended to the uninflected form *gesended*.
- (3) In trisyllabic forms where the vowels of the second and third syllables are both high, considerable confusion reigns. Thus, in the type **hēafudu* where the regular development should be to *hēafdu*, alternative forms *hēafodu*, cf. nom.sg. *hēafod*, and Ps(A) *hēafud*, cf. *word*, occur.

¹ On the other hand, where in the same type the first syllable contains a short vowel, for example, **wætru* ‘waters’, the regular development shows variation, for example, both *wæter* and *wætru*, the latter often also with later epenthesis to *wæteru*, similarly *wolcenu* ‘clouds’. Which development occurred was no doubt dependent upon varying assessments of the weight of the first syllable.

² Two forms which are difficult to explain are *bet* ‘better’, *ymb* ‘about’, beside *ymb*. EpGl, ErfGl 440 *aetgāeru*, *aetgaru*, CorpGl 922 *aetgāeru* ‘spear’ is probably

nom.sg. from Gmc **-ijō*, see Dahl (1938: 148) and references therein, Campbell (1959: §591n2). RuneAuzon *fiscflōdu* ‘fish-flood’ may be acc.sg. *n*-stem, see for this suggestion and discussion of earlier proposals Ball (1988: 110–11).

6.25 Consonantal /j/ appears to have been lost in the same set of circumstances as /i, u/, and this is the explanation of, for example, weak class 1 verbs such as *fremman* ‘perform’ < **fremmjan* < **framjan* and forms of *ja*-, *jō*-stem nouns such as *cynna* ‘race’ gen.pl., *synna* ‘sins’. There is a marked contrast, however, between forms such as *cynn* nom.pl. < **kunnju* and *wītu* ‘punishment’ nom.pl. < **wītiu*. The latter is explained by the assumption that apocope was earlier than syncope, but it is difficult to find grounds for asserting that loss of /j/ in similar situations was earlier yet. More plausible than any chronological explanation is one which relies on the phonological character of these changes. It is notable that syncope and apocope reduce the number of syllables by one, and it may be that there was a general constraint that no word should have a reduction in length of more than one syllable. All the forms discussed in this and the preceding sections would be explained by such a constraint.¹

¹ See Campbell (1959: §353n5) for an alternative, but unclear, explanation.

IV Shortening

6.26 As described in §6.13, the processes of syncope and apocope of short vowels in early OE were paralleled by a shortening of long vowels in unstressed syllables. The consequence of all these processes was that the earlier contrast in length which had been found in unstressed as well as stressed syllables is no longer found in unstressed syllables by the time of the earliest texts.

6.27 Long vowels in unstressed syllables could remain in proto-OE under a variety of circumstances:

- (1) The Gmc vowel was originally trimoric (usually because of contraction of a bimoric vowel with an immediately following unstressed vowel).¹ The most frequent or clearest examples are:² nom.pl., acc.pl., gen.sg. of *ō*-stems, for example, **gibōoz* > **gibō*; the gen.pl. of all nouns, for example, **dagōo* > **dagō*; nom.sg. of masc. *n*-stems, for example, **gumōo* > **gumō*.
- (2) By Siever’s Law (see Collinge, 1985: 159–74) Gmc **-ja-* developed as **-ija-* after a heavy syllable, for example, **andija*. In *ja*-stem nouns the sequence developed as **-ī* with loss of final **-a*, for example, **andī*. The details are uncertain, but it is simplest to suppose that **-ī*

developed too late for Gmc shortening to take place, cf. Luick (1914–40: §297A1), Campbell (1959: §356.3).

- (3) Long vowels also remained either finally before a consonant or medially. Examples finally include: weak verb class 2 forms such as **lufōs*, **lufōþ*, **lufōd*, **lufūd*; superlatives, such as **blindūst*, occasional **blindōst*; 3pl.pr.ind. as in **riðanþ* > **riðōþ*; occasional gen.dat.sg. of old *īn*-stems, such as **strangīniz* > **strangī*; the formative elements *-īg, *-īm (diminutive and adjectival), *-ūþ (of whatever source), cf. OE *mihhtig* ‘powerful’, *cicen* ‘chicken’, *stānen* ‘of stone’, *fiscōþ* ‘fishing’. Examples medially include inflected forms of those types cited immediately above.³
- (4) In late Gmc the diphthongs */ai, au/ were monophthongized to */aɪ, oɪ/ in unstressed syllables, with consequent fronting of */aɪ/ > */æɪ/. These monophthongizations must, of course, take place before the usual development of the two diphthongs to */aɪ, æu/, see also §6.29. Examples are found in the pr.subj. of all verbs, for example, **helpæ*; dat.sg. of *a*-, *ō*-stems and fem. strong adjs., such as **stānæ*, **gibæ*, **blindræ*; masc.nom.pl. of strong adjs., such as **blindæ*; and the gen.dat.sg. of *u*-stems, such as **sunō*.⁴

¹ It is unnecessary to posit ‘IE abnormal intonation’ (*Schleifton*) to account for these long vowels in proto-OE, see especially Lane (1963). See further, however, n2 below. For clarity and to avoid confusion with *Schleifton*, the Germanic trimoric vowels are indicated here by a long vowel + identical short vowel, for example, *-*ōo*.

² Not all these cases can safely be classified as trimoric in Germanic, but the problem is extremely difficult and controversial. Lane (1963) provides one view and an extensive bibliography, see also Stiles (1988a).

³ The gen.pl. of fem. *n*-stems falls under (1) above, that is, *-*anōo*.

⁴ Also to be taken here is OE *eahta* ‘eight’, cf. Goth *ahhta*.

6.28 By §6.27 the following long vowels originally existed in OE unstressed syllables: */iɪ, uɪ, æɪ, oɪ/. Under shortening the first three of these merely lost their length, giving */i, u, æ/.¹ Hence typical developments of the types discussed above include: **andī* > **endī* > **endi* ‘end’,² **blindūst* > **blindust* ‘most blind’, **stānæ* > **stānæ* ‘stone’, and so for all other examples involving these vowels. In the case of */oɪ/, however, the shortening was to /a/, which then remained in OE, for example, **gumō* > *guma* ‘person’, **dagōs* > *dagas* ‘days’, and so for the other examples in §6.27.

¹ For later developments of these vowels in OE, see §§6.46ff.

² The relative chronology of syncope, apocope, and this shortening demonstrates that the shortening must be later than *i*-umlaut, see §§6.23, 33.

6.29 Essentially the same processes as those described above occur in the second elements of original compounds when they become obscured and

hence lose secondary stress. However, in such cases the developments were clearly dependent upon the rate of obscuration. Examples which are either early or chronologically indeterminate follow the patterns of §§6.27–8, for example, **-līk* > *-lic*, as in *dæglic* ‘daily’, etc., *fulwiht* ‘baptism’ < **-wiht* ‘consecration’, *æfest* ‘malice’ < **afūnsti-*, *earfep* ‘trouble’ < **arbaiþ-*, *ēored* ‘troop’ < **eohraid*, cf. §6.5 for alternative developments of the last two forms, where loss of stress is later than monophthongization of **/ai/*. In the case of *fultum* ‘help’ **/o/* < **/o:/* < Gmc **/au/* has been raised to */u/* before a nasal, see §6.4, and the same occurs with shortening of **/a:/* in *andluma* ‘utensil’ beside *andlōma*. If obscuration of the compound was later than monophthongization of **/ai/*, then naturally shortening would be to */a/*, which would then remain. This is particularly characteristic of adverbs with second element *ā* ‘ever’, such as *āwa* ‘always’, *gēna* ‘yet’, *gȳta* ‘yet’, *sōna* ‘soon’. The alternative forms *āwo*, *gēno* are due to the developments in ‘tertiary stress’ discussed under §6.4.

6.30 If obscuration of the compound was later than described above, then diphthongs whether originally long or short usually developed as the nearest short vowel corresponding to either the first or the second element, cf. the examples of diphthongs resulting from back umlaut in §6.11. Examples from */æa/* include: Ru1 *ānlepe*, Li *ānlapum* ‘single’, ÆLS 197 *racentægum* ‘fetter’ dat.pl., nWS *þah* ‘although’. Examples from */eo/* include: Ch 1497.2 *hēaderhundas*, LawRect 4.2 *hēadorhund* ‘deer-hound’, Ps(A) *lādtow*, ‘leader’ (4×),¹ Li *lāruu*, Ru2 *lārow* ‘teacher’. For examples from */io/* due to breaking see §6.8. The sound represented by EWS ⟨ie⟩ appears to have developed to */e/*, hence *ānlepe*, cf. above, *æwerdla* ‘damage’ beside *æwyrdla*, *cyneġerd* ‘sceptre’ (rare, alongside usual *cyneġyrd*, see Borowski, 1924: 61), *fulteman* (not LWS) ‘assist’.

¹ Also DurRitGl 3.3 *hlattu*.

6.31 Where the original long vowel is final in a nominal first element of a compound, then it usually¹ remains after a single syllable, even when heavy, for example, *endeleas* ‘endless’, *lēcēcraeft* ‘leech-craft’, *riċedom* ‘kingdom’, but it is syncopated after two syllables, for example, *ārendwreca* ‘messenger’, *cāserdom* ‘empire’.² Where, however, the first element of a compound is an adjective, the vowel is more often syncopated,³ hence *cēnlice* ‘keenly’ < *cēne*, *clānness* ‘cleanness’ and other forms cited in Campbell (1959: §359). But many such forms show variation, for example, *ēcnes* ‘eternity’, *ēcelic* ‘eternal’; *mildheort* ‘kind-hearted’, *mildelic* ‘merciful’; *wilddēor*, *wildedēor* ‘wild animal’; for other similar forms and also forms where the first element is prefixed by *ge-*, such as *ġedæft(e)lice* ‘deftly’, see again Campbell (1959: §359).

¹ But for cases involving *ō*-stem nouns see §6.15n1.

² Where the connecting vowel is preceded by a resonant, as in the type represented by *efenlic* ‘even’, the same development occurs, cf. *efne* ‘evenly’, but there is then either vowel epenthesis or syllabification of the resonant, see further §6.41.

³ Examples of syncope where the first element is nominal include compounds of (*ge*-)*mære* ‘boundary’, Ch 413.4 *mærpōl* ‘boundary pool’, Ch 911.4 *gemærtrēow* ‘boundary tree’, LWS *sticmælum* ‘in pieces’, *yrfweardnys* ‘inheritance’, both beside forms with older *styçce*-, *yrfce*-.

6.32 Historically the long medial vowels subject to shortening under §§6.27–8 were secondary-stressed after a heavy syllable, see §§2.86–7 and references. Under shortening the secondary stress should be lost and therefore it would be expected that syncope of the short vowel would take place after a heavy syllable.¹ Such syncope is in fact mainly restricted to Angl dialects, hence PsGl(A) 44.15 *gyldnum* ‘golden’, also CP 171.21, Li, Ru2 *mægdne(s)* ‘maiden’ gen.dat.sg., PsGl(A) 80.3 *mōnþes* ‘month’ gen.sg., Ps(A), Nbr *nētna* ‘animals’. In WS regular syncope of such vowels is found regularly only in *mōnaþ* ‘month’. A similar, but more restricted, situation holds for adjectives in *-ig*, from original **-īg*, such as Ru2 *hefge* (2×) from *hefiġ* ‘heavy’.²

¹ Syncope of the connecting vowel in the past of weak class 2 verbs does not, however, occur in any dialect, hence *ascode*, *ascade* ‘asked’. The non-existence of the type **rēafde* ‘plundered’, cf. PsGl(A) *rēafade*, suggests that the failure of syncope is morphological, rather than due to the unacceptability of any resulting consonant cluster.

² But syncope of *-ig* < **-æg* < **-ag* is regular, see §§6.15, 16 and n1. It is possible that the rare examples of the type *hefge* are due to the influence of *hālge*, etc., and that normally the sequence **-īg* developed through *-ig* to *-ī*, thus resisting syncope.

6.33 It should be deducible from the variety of developments cited in the preceding sections that vowel shortening was a process which occurred over a period of time, but that that period of time was roughly contemporaneous with the time of syncope and apocope. This would be consistent with the claim that vowel shortening is merely a different manifestation of the same phonological process, namely the reduction in length of unstressed vowels. Note, however, that the normal situation is that shortening was not subsequently followed by apocope, for example, *ende* (§6.28), although the situation with regard to syncope is more variable in terms of both morphology and dialect, see especially §§6.31–2.

V Epenthesis and syllabification

6.34 By the time of the very earliest texts two apparently similar but in fact phonologically and dialectally distinct changes occurred which resulted

in the epenthesis of an unstressed vowel. The first type of change, a genuine vowel epenthesis (see Girvan, 1931: §180), seems to have been caused by the awkwardness of final¹ consonant clusters of the type liquid + labial or velar consonant, hence *wylif* ‘she wolf’ < *wylf*. The second type of change involves resonants (/l, r, m, n/) which occur finally after a consonant due to the loss of an unstressed vowel either in Gmc or in proto-OE. In such circumstances either the resonant could syllabify or an unstressed vowel could occur before the resonant, the whole process being very similar to that in PDE, hence OE *bēacn*, *bēacon*, cf. PDE *beacon* = /bi:kən, bi:kən/. Clearly similar to this process is a vocalization of /j, w/ > /ij, uw/, for example, *herġas* > *heriġas* ‘armies’. The first type of epenthesis is discussed in §§6.35–7, the second in §§6.38–41.

¹ The only example with such epenthesis in a consonantal onset is the rather odd Inscr 8.2.3 *berōpor* (2×) for *brōpor* ‘brother’. The attempt by d’Ardenne (1939) to justify the form – alongside her explanation based on error by the inscriber – appears somewhat misguided.

6.35 In Nbr, and to a lesser extent Merc, in final consonant clusters containing a liquid plus a non-homorganic consonant, usually a velar fricative and possibly followed by a further consonant, an epenthetic vowel is sometimes inserted between the liquid and the following consonant. Most commonly the epenthetic vowel is a high vowel agreeing in backness with the preceding stressed vowel,¹ but occasionally *e*, *a* are found after a nonhigh stressed vowel. Examples from early texts include: RuneAuzon 2 *ferġenberig* ‘mountain-side(?)’, 9 *wylif* ‘she-wolf’, LRid 6 *ðerih* ‘through’, 13 *aerigfaerae* ‘flight of arrows’, RuneMortain 1 *ġewarahtæ* ‘made’, ErfGl 996 *brōfhuyrihta* ‘wood-worker’, EpGl 652, CorpGl 1284 *bearug* ‘pig’,² Ch 190 (also other charters of varying dates) *Hēanbyrig*, Bede † *Tilaburug*, LVD † *Aluch-*, † *Eorup-*, LVD, Bede † *berec(h)t*, also the Kt Ch 21.5 (Stowe) † *Bericht-*, and Ch 293.11,13 † *Alah-*, † *Walahhere*.

¹ For the present phenomenon, and also for the syllabification phenomena of §6.38, a diphthong must be counted as a back vowel.

² For the assumption that *bearug* was formerly monosyllabic, that is, *bearg*, see now Ball and Stiles (1983: 12–13, App. and references therein) against Campbell (1959: §360n2).

6.36 In later texts the phenomenon appears to be mainly restricted to Nbr. Forms similar to those above include: Li, Ru2 *burug*, *byriġ* dat.sg., Li *worohton*. Additional forms include LkGl(Ru2) 9.62 *suluh* ‘plough’, MkGl(Ru2) 8.38 *arognisse* ‘profligacy’, JnGl(Li) 2.14 *culufro* ‘dove’, MtGl(Li) 28.4 *fyriht* ‘fear’, DurRitGl 9.13 *forohtandum*, Li *wyrihta*, -e ‘workman’, JnGl(Ru2) *berehtnað* ‘makes bright’, JnGl(Ru) 9.28 *aweriġdun*

‘they cursed’, JnGl(Ru2) 2.9 *inberigde* ‘tasted’, Ru2 *fyliġde, fyliġdun* ‘followed’, MkGl(Ru2) 26.34 *swerige* ‘swear’.¹ In Li the development of /ij/ > /i/, see §7.70n1, is found in forms such as *sweria, heriað* ‘they praise’.

¹ Here *fyliġde, swerige*, etc. should not be confused with the similar forms in LWS discussed in §6.44.

6.37 There is a scattering of forms similar to those of §6.36 in LWS. Typical examples include: ÆCHom I 226.25, ÆELS (Basil) 222 *buruh* ‘city’, ÆCHom I 138.4 *culuftran* ‘dove’, BenR *yleca, ilece* ‘same’, Mt(WSCp) 11.2 *weoruc* ‘work’.

6.38 When in OE one of the resonants /l, r, m, n/ comes to stand finally after a consonant, then, as in PDE, that resonant syllabifies (to [l̩, r̩, m̩, n̩]). But, again as in PDE, an epenthetic vowel may appear before the resonant as an alternative to syllabification. In apparent contrast to PDE, however, the epenthetic vowel is usually *e* (*i* in early texts) if preceded by a front vowel, and *o* (earlier *u*) if preceded by a back vowel (see also §6.35n1). However, the use of *e* becomes frequent even after back vowels (see the figures in §6.40), and this would suggest that the epenthetic vowel is generally to be interpreted as /ə/, see further §§6.59–62.^{1,2}

¹ However, in early texts the use of ⟨e⟩ after back vowels may be because ⟨el, er, em, en⟩ were used as digraphs for syllabic consonants. Later, however, it is more likely that it represents /ə/ as above.

² This is presumably in part the reason for the appearance, albeit less frequent, of ⟨o⟩ after a front vowel, although it is notable that most such cases involve /r/, for example, PsGl(A) 77.10 *bitur* ‘bitter’, note also GuthA, B *bittor* (2×), *fefor* ‘fever’ (frequent alongside *fefer*), JnGl(Ru2) 4.52 *ġestordæge* ‘yesterday’, *pipor* ‘pepper’ (more frequent than *pipen*), and, before /m/, rare *wæstum* ‘fruit’.

6.39 In early texts epenthesis, although common, is less frequent than retention of the consonant alone and does not occur with [m̩]. Thus EpGl, ErfGl have forms such as 111 *seġil-* ‘sail’, 272 *bebir* ‘beaver’, 636 *apuldur* ‘apple-tree’, 919 *-bāēcon* ‘beacon’, against the more frequent type exemplified by 84 *hræġl* ‘robe’, 399 *bebr*, 567 *seġn* ‘sign’, 326 *thuachl* ‘washing’, 638 *apuldr*, 992 *-bēacn*, 777 *uuorsm* ‘pus’.¹ The distribution of such forms in CorpGl is very similar, but note CorpGl 1152 *þuner* ‘thunder’, an early example of ⟨e⟩ after a front vowel. Elsewhere Bede has *-cāstir, Eorcun-* in names. There is no need to assume that the forms without an epenthetic vowel are analogical, as do Luick (1914–40: §318), Campbell (1959: §363), for it is more probable that scribes were somewhat uncertain as to the most appropriate spelling.

¹ ErfGl 777 *uuorsin* is an obvious error for *uuorsm*.

6.40 Typical examples of the varying forms in later texts are:¹ *æpl:æppel* (1:5) ‘apple’; **æcr:æcer* (0:6) ‘field’; *hræfn:hræfen* (0:0) ‘raven’; *fæþm:fæþem* (0:0) ‘embrace’; *fugl:fugol:fugel* (0:4:10) ‘bird’; *wundr:wundor:wunder* (0:61:3) ‘wunder’; *wolcn:*wolcon:wolcen* (11:0:0) ‘cloud’; *botm:*botom:*botem* (0:0:0) ‘bottom’. It may therefore be deduced that there is a sharp distinction in the treatment of syllabic liquids and syllabic nasals. For the former epenthesis is strongly preferred, whereas for the latter the syllabic nasal is equally strongly represented. The same holds true for syllabic nasals after a long syllable, such as *wæþn:wæþen* (3:1) ‘weapon’; *wæstm:wæstem* (43:0) ‘fruit’; *tācn:tācon:tācen* (20:0:15) ‘token’; *māþm:*māþom:māþem* (4:0:0) ‘treasure’. Exceptionally, if the preceding consonant is a dental stop, then syllabic [ʃ] almost always remains, as in *ād̥l* ‘disease’, *botl* ‘building’, *nædl* ‘needle’, *setl* ‘seat’, *spāt̥l* ‘spit’, and epenthesis, as in OccGl 49.304 *setol* (see §6.38n2), is extremely rare.

¹ The distribution figures below refer to the total frequency of the simple forms in ÆCHom, ÆLS, CP, and Oros. However, a double asterisk before a form has the usual meaning of non-occurrence in OE generally.

6.41 Medially epenthesis before a resonant takes place most commonly in the paradigms of two types of adjectives: (1) *alō*-stems whose nom.sg. ends in a syllabic resonant, such as *biter* ‘bitter’, *efen* ‘even’, *fæger* ‘fair’, *hlūtor* ‘pure’, *wacor* ‘wakeful’; (2) *jaljō*-stems whose nom.sg. ends in consonant + resonant + /e/,¹ that is, *fācne* ‘deceitful’, *frēcne* ‘horrible’, *dīgle* ‘secret’,² *gīfre* ‘greedy’, *lǫþre* ‘evil’, *sýfre* ‘sober’, *tīdre* ‘weak’, *þýstre* ‘dark’. In all these cases, where an inflexion or suffix begins with a non-identical consonant then the resonant does not usually syllabify but instead epenthesis is regular, hence *biterne*, *biternes*, *fācnre*, etc., but *fācne* acc.sg.masc. < **fācn+ne*. This epenthesis is also seen in a few isolated words where the following consonant is part of the stem, such as *lāwerce* ‘lark’ (also *lāwerce*, not to be distinguished in this respect), Wid 112 *Emercan* acc.sg. < **Emrkan*.³ When the inflexion begins with a vowel, it would be expected that the resonant would be nonsyllabic, hence *bitre*, *bitrum*, etc., but, especially when the resonant is /r/, syllabicity can be retained and an epenthetic vowel introduced, hence forms such as *biterum*, and, similarly in nouns, *æceras* ‘fields’.⁴ Elsewhere this type is rare, for example, ÆCHom I 172.2 *fugole* ‘bird’ dat.sg.

¹ But not if the consonant is itself a resonant of higher sonority, for *dyrne* ‘secret’ shows no epenthesis in Beo 1355 *dyrnra*, or the type *dyrnlic*. It may be presumed that in such cases /n/ is nonsyllabic.

² But the forms here may be from the alternative formation *dīgol*.

³ In Nbr especially there is a strong tendency for an epenthetic vowel to appear in the preterite forms of weak class 1 long-stemmed verbs ending in a resonant, such as

dægelde ‘concealed’, *hyngerde* ‘hungered’, *ġetimberde* ‘built’. Elsewhere, and to a lesser extent in Nbr, an alternative development takes place, for which see §6.19n2.

⁴ With increasing frequency WS begins to develop epenthetic vowels before /r/ in the gen.dat.sg.fem. and gen.pl. of the strong adjectival and pronominal declensions, for example, *sumere*, *sumera*; *þissere*, *þissera* (< *þisre*, *þisra*). Such forms already occur in CP, Oros, but are frequent by the time of Ælfric.

6.42 The type of epenthesis described in 6.35 must be later than *i*-umlaut, since an epenthesized /i/ does not cause umlaut. Furthermore, smoothing has taken place in a form such as *berecht* (not ***beorecht*), and this implies that the epenthesis is later than smoothing. But this theoretical chronology is contradicted by the existence of epenthesis in the earliest texts. By way of explanation, the examples of §§6.36–7 probably demonstrate that there was a potential throughout the OE period, not always realized, for the epenthesis, since these examples are often new ones from the end of the tenth century or later. Epenthesis before a resonant must, of course, be later than apocope, since apocope is frequently the source of syllabic resonants. On the other hand, examples of the change are to be found in the earliest texts, and later evidence would suggest that it is a persistent and continuing variation in OE.

6.43 A third type of epenthesis, occurring almost exclusively in WS and more frequently in later texts, has apparently close similarities to the epenthesis before a resonant. This third type occurs when the approximants /j, w/ are found immediately after a consonant, for then their vocalic counterparts /i, u/ may develop between the consonant and the approximant. Thus, for example, we find *heriġas* ‘armies’, *ġearuwe* ‘ready’ nom.pl., for earlier *herġas*, *ġearwe*. It is noticeable that the change only takes place after light syllables,¹ and the most reasonable explanation is that only after a short syllable were /j, w/ ambisyllabic in this position, and that the epenthesis had the function of breaking up the awkward consonant cluster.

¹ A form such as PsGl(I) 99.3 *læsuwe* ‘pastures’ must be regarded as exceptional.

6.44 Typical examples of this epenthesis in WS¹ include the following: *byriġ* ‘city’ dat.sg., *byliġ* ‘bag’, *fylġan* ‘follow’, *heriġas* ‘armies’, *miriġþ* ‘joy’, and short-stemmed verbs of weak class 1 with stem-final /r/, such as *heriġan* ‘praise’, *neriġan* ‘save’, *weriġan* ‘defend’, etc.; inflected forms of *wa*-stem nouns and adjectives such as *searuwa* ‘device’ gen.pl., *ġearuwe* ‘ready’ masc. (also fem. *wō*-stem) nom.pl., *ġeoluwe* ‘yellow’, etc., *wō*-stem nouns (also adjs., see *ġearuwe* above), such as *beaduwe* ‘battle’ dat.sg., *sinuwa* ‘sinews’, and the fem. *n*-stem *swaluwe* ‘swallow’. In the case of /ij/ this can then simplify to /i/, see §7.70n1, for example, *byri* ‘city’, *fylġan* ‘follow’, and many others. In the case of weak verbs such as *heriġan* the

spelling (herian) is, especially in earlier texts, ambiguous between the present development and the use of ⟨i⟩ to represent /j/, see §2.76. The gradual emergence of spellings indicating epenthesis can be quite well traced in WS. Thus, for example, in CP and Oros ⟨byrġ⟩ spellings outnumber ⟨byriġ⟩ spellings by about 2: 1, whereas ⟨byrġ⟩ is not found in ÆCHom, where ⟨byriġ⟩ is regular alongside a scattering of ⟨byri⟩ spellings.

¹ Outside WS the epenthesis is rare. CollGl 721 *ġerewe* ‘ready’ could be due to WS influence on a late Kt text. Ru1 has MtGl 26.53 *herigas* ‘armies’, 14.71, 5.36 *sweriga*, *swerigæ* ‘swear’, MtGl 9.17 *beligas* ‘bags’ (2×, alongside *belġas* 2×), but these forms could either be due to the epenthesis described in §6.36 or be examples of further WS influence in this text.

6.45 A type of epenthesis rather different from any discussed above appears especially in LWS texts in compound and other derived forms. The process can be exemplified by a word such as *bærefōt* ‘barefoot’, where an original nonhigh vowel was syncopated, see §6.15, giving *bærfōt*. The process is found also with heavy *a*-stems, for example, *cūðelice* ‘certainly’, *n*- and other consonant stems, for example, *nihtelic* ‘nightly’,¹ the prefix *æ*-, hence PrudGl 1.953 *ælewealdene* ‘almighty’, and various personal and place-names, such as ChronE 664.5 *Cōleman*. Outside WS DurRitGl has Abbrev 186 *rehtelice* ‘rightly’. For further details see Campbell (1959: §367). The cause and significance of these forms are both doubtful. They may be due to the influence of variation elsewhere, see §6.21, or they might be rhythmically based, but it seems impossible to be precise.

¹ But EpGl 673 *necti*-, 857 *nectægalae* ‘nightingale’ are probably gen.sg. forms, see Pfeifer (1974: §78).

VI Mergers of unstressed vowels

6.46 The consequence of the various changes described in earlier sections is that there had developed in OE a system in unstressed syllables of five contrasting short vowels: three front: /i/, e, æ/; and two back /u, a/.^{1,2} This system must have been still in existence at the time of both *i*-umlaut and syncope and apocope, given, for example, the distinctions between high and nonhigh vowels in all of these changes. However, just as the settlement and post-settlement periods saw a general reduction in quantity of OE vowels, there set in train by the time of the earliest texts at the latest a reduction in qualitative differences between unstressed vowels, eventually producing by ME a system where the principal unstressed vowel was /ə/, see Jordan (1974: §§133ff.). The historical evolution of most of the mergers which may be classified under this rubric is generally well marked in the

manuscripts, but conservative spelling traditions can sometimes hide the spread of particular mergers.

¹ /a/ is from Gmc */o:/, see §6.28.

² There must be some doubt as to whether /i/ and /e/ were indeed phonemically contrastive, and [e] could well be regarded as an allophone of /i/, see Stiles (1988b: 339–40).

6.47 There appear to be two distinct processes at work in the reduction of qualitative differences. On the one hand there are simple mergers of previously separate phonemes, the first of which results in a single front vowel phoneme, which we may label as /e/. On the other hand, there is a strong tendency for high unstressed vowels to be lowered. This, together with the mergers described immediately above, leads to a triangular vowel system of the type /e, a, o/, although see the detailed discussions below for reservations concerning this system. There then follows a merger of the back vowels to a back vowel otherwise of indeterminate quality. Here we shall indicate that single back vowel as /ɔ/, where the distinctive symbol serves only to disambiguate between that merged vowel and its sources. Finally, the unstressed front and back vowel merge, presumably as schwa /ə/. The structural shifts in the vowel phonemes of unstressed vowels which have just been outlined form the basis for the organization of the discussion in this section.

(a) /æ/ > /e/

6.48 At about, or perhaps slightly earlier than, the time of the earliest texts, unstressed /æ/ completely merged with unstressed /e/. In most OE, forms which originally had /æ/ are indistinguishable from forms with earlier /e/, being consistently spelled ⟨e⟩. The most frequent occurrences include the following: nouns – gen.dat.sg. of *a*-stems, *stānes*, *stāne*; acc.dat.sg. of *ō*-stems, *lāre*;¹ nom.sg. of fem.neut. *n*-stems, *tunge*, *ēaġe*; adjectives – nom.pl.masc., *blinde*; the adverbial suffix *-e*, *hearde* < *heard* adj.; verbs – pr.subj., *helpe*;² sg.pa.ind. of weak verbs, *fremede*, *fremedest*, *fremede*; pres.part. *riðende*, pa.part. of strong verbs, *riden*.^{3,4,5} It might be expected that the merger of /æ/ with /e/ would have the consequential effect of fronting /a/ (>/a/). This, however, is not true, hence regular *guma* ‘man’, *dagas* ‘days’, etc. and rare EWS *-onne* infl.inf. alongside usual EWS *-anne*.⁶

¹ Also the gen.sg. of most *ō*-stems, which might be due to the identity of the acc.pl. and gen.sg. in the weak fem. declension, see Campbell (1959: §585), or from the dat.sg., see Dahl (1938: 133–4). Clearly a resolution of the problem is difficult, but the dat.sg. is the more obvious choice.

² And hence also WS 1sg.pr.ind. *rīde*, especially if this is from the subj. via contracted verbs, see Bazell (1939), Cowgill (1965), Stiles (1988b: 340–2).

³ But /æ/ here is from inflected forms, see §6.2.

⁴ Naturally the merger also occurs when /æ/ in the second element of a compound becomes unstressed, for example, *ǣfest* ‘lawful’ beside *ǣfæst*, *ǣarfeð* ‘strife’, *ǣored* ‘troop’, see §6.29, *hired* ‘household’, Li *ġenēoleca* ‘approach’ (< *-lǣcan*), compounds of *ærn* ‘house’, such as *bēodern* ‘refectory’, and various others.

⁵ See §6.51 for the suffix *-æġ*.

⁶ The form is analogical on the basis of the inf. *-an*. Elsewhere regular *-enne* displays the normal phonological form through *i*-umlaut.

6.49 The very earliest texts have many spellings reflecting earlier /æ/. Thus in eNbr CædH has gen.sg. *-rīcaes*, *metudæs*, *-cynnæs*, *ġihuæs*, BDS has *yflaes*, and typical other forms include CædH 4 *astelidæ*, LRid 5 *hafæ*,¹ 11 *uīdæ*. In the eNbr runic inscriptions are RuneAuzon 4 *hrōnæs*, 10 *hīæ*, etc., RuthCr 44 *riīcnæ*, 45 *hēāfunæs*, etc. But alongside these are forms with ⟨e⟩, such as CædH 6 *hrōfe* dat.sg., *heben* (cf. 1 *hefaen-*), BDS 1 *fore*, 2 *sīe*, RuthCr 40 *walde*. Further, there are examples possibly with ⟨æ⟩ for ⟨e⟩, such as RuthCr 48 *bismærædu*, RuneAuzon 9 *ġibrōþær*.² BedeH(M,L) preserves *æ* well, and in LVD ⟨æ⟩ is more common than ⟨e⟩. In the eMerc glossaries EpGl has 192× ⟨æ⟩ (including ⟨æ̅⟩), 8× ⟨e⟩ in final syllables; 30× ⟨æ̅⟩, 16× ⟨e⟩ medially. The parallel figures for ErfGl are 182× ⟨æ̅⟩, 40× ⟨e⟩; 16× ⟨æ̅⟩, 35× ⟨e⟩ (Pheifer, 1974: §63). In CorpGl ⟨e⟩ is regular everywhere, with few examples of ⟨æ̅⟩, see Wynn (1956: §85). The earliest charters, up to c.775, have examples of ⟨æ̅⟩, such as Ch 8.2 (679) † *Uuestanae*, Ch 21.1 (700 or 715) † *Limingae*, Ch 106.2 (767) † *herġae* ‘temple’ dat.sg., Ch 59.6 (770) † *Saluuerpæ*, but even these forms occur beside others such as Ch 21 † *Wīēghelmes*, † *Mēġuines*, Ch 31.5 (c.767) † *Byrnhames*, † *Uuealhhunes*. This suggests that the merger had already begun by the beginning of the eighth century and was complete before the end of that century, cf. §6.53.³

¹ Cf. §6.48n2. The form is unusual in Nbr.

² See, however, §3.30.

³ Examples of ⟨æ̅⟩ in lNbr and Ru1 are of different origin, see §6.62.

(b) /i/ > /e/

6.50 At an only slightly later date than the merger of /æ/ with /e/, see §6.53 for discussion, unstressed /i/ was lowered to /e/ in most environments. Examples of earlier /i/ then become indistinguishable in spelling from examples of earlier /e/ (and earlier /æ/). The most frequent occurrences are: nouns – nom.sg. of *i*- and *ja*-stems, *wine*, *ende*; adjectives – nom.sg. of *i*-, *ja*-stems, *freme*, *wilde*; the superlatives from earlier **-ist*, *yldest*; verbs – 2,3sg.pr.ind., *rīdest*, *rīdeð*; pa.subj., *rīde*; the connecting vowel of weak class 1 preterites, *fremede*; prefixes – *be-*, *ġe-*;¹ prepositions – *be*, *embe*; particles – *ne*, and the many examples of epenthetic /i/ discussed in §§6.34ff.²

¹ Also *te-* < *ti-*, as in CP 49.11 *teflēowe* ‘separate’ pr.subj.sg., 443.33 *teweorpanne* ‘overthrow’, also ErfGl 343 *teċīnid* ‘split’, 344 *tedridtid* ‘trampled upon’, cf. EpGl 195 *tislōg* ‘destroyed’.

² As with /æ/, lowering of /i/ also occurs in the second element of a compound when this becomes unstressed. Examples include: *ārest* ‘resurrection’ (beside *ārist*), *endlefan* ‘eleven’ (beside *endlifan*), *enetera* ‘one-year-old’ < **ānwintre* (beside *enitre*), *fyrwet* ‘curiosity’ (beside *fyrwit*). Lowering to /e/ from /y/ can be seen in *æfest* ‘malice’, *cynren* ‘generation’ (beside *cynryn*), *nosterl* ‘nostril’ < *nosþyrl*), *yimbhwerft* ‘circle’ (rare beside *yimbhwyrft*). LWS substitutions of ⟨y⟩ for ⟨e⟩ are particularly frequent in PsGl(C) and WScp, for example, *fædyr* ‘father’, *hælynd* ‘saviour’, and may be the result of Kt influence, cf. §§5.194–5.

6.51 A major exception to the lowering is found with suffixes where /i/ is followed by a palatal or palatalized consonant. This is most obviously the case with /j/ and palatalized velars; also to be included here is the velar nasal in the group *-ng*, which may equally have been palatalized. Consequently, /i/ regularly remains in the suffixes *-iċ*, *-liċ*, *-iġ*, *-iht*, *-iċ*, *-ing*. Typical examples of each are: Angl *ēowic* ‘you’ acc.pl., *heofonliċ* ‘heavenly’, *mihtig* ‘mighty’, *stæniht* ‘stony’, *mennisċ* ‘human’, *æþeling* ‘prince’. Occasionally lowering does occur under the influence of a following back vowel and the subsequent retention of velar articulation of the consonant, for example, Bede *heofonlecan* (16×), *heofonlecum* (2×), Mart 1.55 *mihtegu*, Ch 174, Ch 377 *stānehtan* (see §6.10n2), Bede 2 7.118.6 *mennesca*,¹ ÆCHom I 232.3 *cynengum* ‘king’ dat.pl. In the case of forms such as *mihteliċe* ‘mightily’ (ÆCHom, ÆLS 6×, beside *mihtiglice* 12×), the development is through monophthongization of /ij/, see §7.70 and n1, and shortening to /i/, which is then regularly lowered.²

¹ Note the rather odd PsCa(A)1 13.3 *mennesċes*, also at HomS 70.V.

² The variation in the suffix *-nes*, *-nis* might be relevant here, but it seems more probable that the variation goes back to variation in Gmc, especially since there are dialectal differences in OE also. Thus *-nis* is mainly Angl, whilst *-nes* is mainly WS, see Brunner (1965: §142A).

6.52 The developments of §§6.50–1 would suggest that unstressed /i/ and /e/ do indeed merge as the phoneme /e/, but that that phoneme then has an allophone [i] before palatals. This is confirmed by the development of the suffix *-æġ*, which shifts to *-eġ* by §6.48. In this environment we would expect the allophone [i] to appear, and indeed this is the regular spelling, for example, *bōdiġ* ‘body’, *hāliġ* ‘holy’, *moniġ* ‘many’, and other forms cited in 5.85.10b. This development is particularly important in weak class 2 verbs, such as **lufōjan* > **lufejan* (*i*-umlaut and shortening) > *lufijan* (⟨lufian⟩) ‘love’.

6.53 In the earliest texts /i/ is preserved in spelling with slightly more frequency than /æ/. Thus in eNbr texts we find: CædH 2,3 *ġi-* prefix, *ēci*

‘eternal’, *dryctin* ‘lord’ (both 2×), 5 *āerist* ‘first’, BDS 1 *uuurthit* ‘he becomes’, 5 *dōēmid* ‘determined’, LRid 3 *bi-* prefix, *ni* ‘not’ (4 or 5×), 7 *hrisil* (< *hrisl*) ‘shuttle’, 9 *uyrdi* ‘fate’ gen.sg., and various other forms. In the runic inscriptions examples include RuthCr *gi-* (4×), 45 *ni*, 48 *bistēmid* ‘moistened’, RuneAuzon *gi-* (2×), 10 *wylif* (< *wylf*) ‘she-wolf’, and others. On the other hand, there are signs of lowering in LRid 2 *āērest*, *ni* (2×), RuthCr 39 [*ond*]*ġeredæ* ‘he stripped’.¹ In Bede(H) and LVD the situation is not dissimilar from that for /æ/, although ⟨e⟩ is common alongside more frequent ⟨i⟩ in the elements † *Dene-*, † *Here*. In the early Merc glossaries EpGl has 82× ⟨i⟩, 8× ⟨e⟩ in final syllables, 134× ⟨i⟩, 11× ⟨e⟩ in medial syllables, and 52× ⟨i⟩, 13× ⟨e⟩ in prefixes. The parallel figures for ErfGl are 86× ⟨i⟩, 8× ⟨e⟩; 149× ⟨i⟩, 14× ⟨e⟩; 42× ⟨i⟩, 36× ⟨e⟩ (Pheifer, 1974: §63), which are broadly parallel with the situation for merger of /æ/ and /e/, see §5.49. In CorpGl ⟨i⟩ and ⟨e⟩ are about equally frequent (Wynn, 1956: §83). In the early charters ⟨i⟩ spellings are frequent, and ⟨e⟩ spellings only start to appear at about the middle of the eighth century, for example, Ch 24.5 (741?750) † *aeðelhuni* (alongside † *aethilberhtus*), Ch 90.3 (742) *æðelberhti*. ⟨i⟩ spellings are rare after 800. The above evidence would suggest that lowering of /i/ was marginally later than merger of /æ/ and /e/, but nevertheless a strictly eighth-century change.

¹ CædH has a number of related difficult forms. CædH(M) 2 *maecti* may show retention of /i/, but the form is without *i*-umlaut, cf. CædH(L) *mehti*, also CædH(M, L) 9 *allmectig*. This would appear to be due to the influence of the *ō*-declension, see §5.85(2), in which case final ⟨i⟩ could be regarded as an error for ⟨e⟩ (< /æ/). In contrast, whilst CædH(M) 6 has *hāleg* ‘holy’, with /æ/ raised to /e/, but no sign of the development of [i], CædH(L) has *hālig*. It becomes difficult to resist the conclusion that the scribes are confused because the sound changes have already taken place. Equally difficult to explain are RuthCr 56 *rōdi* ‘cross’, RuneAuzon 10 *ċæstri* ‘city’, both in a locative sense. It is by no means certain that the spellings here can be taken as accurate, *pace* Dahl (1938: 123). The forms are, however, supported by the instrumental forms EpGl 97 *ġitiungi* ‘preparation’, 109 *mēgsibbi* ‘love between kinsmen’, see further Dahl (1938: 139–40), Pheifer (1974: §79).

6.54 In INbr texts there is quite frequent retention of ⟨i⟩ in the prefix *bi-* and, to a lesser extent, *gi-*, and in Li ⟨i⟩ is also found occasionally in a variety of other forms, such as *micil* ‘great’, *cyrtil* ‘tunic’, *seġni* ‘seine’, *hidir* ‘hither’. The common ME development of the prefix *ġe-* > *i* is occasionally found in late texts, and this development might suggest that here /e/ had generally a somewhat raised allophonic variant.

(c) /u/ > /o/

6.55 The lowering of /u/ > /o/ which is frequently demonstrated in OE texts is phonologically similar to the lowering of /i/, both in terms of the

phonetic process and in the phonological result. Clearly the change is simply a lowering, so that there no longer exist any high unstressed vowel phonemes; on the other hand, there is ample evidence, more fully discussed below, that the phoneme /o/ which results from the process has an allophonic variant [u]. Frequent occurrences of the change are: adjectives – superlative *-ost*, *blindost*; verbs – past.ind.pl. *-on*, *ridon*, preterite of weak class 2 verbs *-ode*, *lufode*. Typical examples from individual words include: *hēafod* ‘head’, *heofon* ‘heaven’, *werod* ‘troop’, *atol* ‘terrible’, *nacod* ‘naked’.¹ However, there are several major exceptions to the lowering process, see §6.57.

¹ The same lowering is of course found in the second elements of obscured compounds with reduced stress, hence *fracop* ‘bad’, *orop* ‘breath’, see §6.5, and perhaps the obscure *ofost* ‘haste’, cf. EpGl, ErfGl 757 *obust*. The same occurs in the unstressed non-lexical items Ps(A) *ðorh* ‘through’ beside *þurh* elsewhere and *op* ‘to’ beside very rare *up*, although the latter is common as a prefix.

6.56 In the eNbr texts /u/ is preserved almost everywhere, exceptions being the epenthetic vowel in Bede(H) † *Earcon-* beside less frequent *Eorcun-* and LVD *Aebbino*. Otherwise forms of the type CædH *sçylun*, *metudæs*, *barnum*, *foldu* (< **foldun*, see §§7.98ff.), BDS *-snottura*, LRid *uundrum*, *eorðu* (< **eorðun*) are regular. In the early Merc glossaries lowering is indicated in about half of the cases, thus EpGl has 40× ⟨u⟩, 41× ⟨o⟩ medially and finally before a consonant other than /m/ or /ng/, and ErfGl has 49× ⟨u⟩, 30× ⟨o⟩ (Pheifer, 1974: §64). The situation is similar in CorpGl. In later Merc and SNbr texts (Ps(A), Ru1, Ru2) ⟨u⟩ spellings remain very frequently and indeed are regular in Ps(A), and in later NNbr texts ⟨u⟩, although less frequent, is still common alongside ⟨o⟩. Note, however, that the pa.pl.ind. ending is always *-on* in DurRitGl and that *-un* is in a clear minority in Li, thus contrasting strongly with the Merc and SNbr texts, see Berndt (1956: 260–3) for figures. Otherwise ⟨o⟩ spellings are normal, as in the examples cited in §6.55.

6.57 When unstressed /u/ occurred finally before /m/, /ng/, or /k/, or was in absolute finality, or was preceded by stressed /u/, then the process of lowering is, with certain definable exceptions, rarely found. Thus we find dat.pl. *-um*, also the suffix *-sum*, for example, *wynsum* ‘pleasant’, *māþum* ‘treasure’, the suffix *-ung*, for example, *lēasung* ‘falsehood’, *sçotung* ‘shooting’, the suffix *-uc*, for example, *bulluc* ‘bullock’, *munuc* ‘monk’, the nominal inflexion *-u*, for example, *sçipu* ‘ships’, *faru* ‘journey’, *sunu* ‘son’, and various other forms such as *dugub* ‘warriors’, *geogub* ‘youth’. But in texts where the 1sg.pr.ind. of verbs is *-u*, then that vowel is subject to the usual patterning of lowering described in §6.56.

6.58 Chronologically the lowering of /u/ must be the latest of the three shifts discussed above, although since WS texts more regularly show the lowering than do Angl texts and since even the earliest WS texts display lowering, it is conceivable that in WS at least lowering of /u/ could have been carried out at a very early date. But the mixture of forms in the early Angl texts is greater than in the other texts, and it is especially notable that the eNbr texts always have ⟨u⟩. This suggests a date perhaps later than smoothing but not later than *u*-umlaut, see §5.103 and n2.

(d) *Merger of remaining unstressed vowels*

6.59 The changes discussed so far above result in a phonemic system of three unstressed vowels, namely /e/, /a/, /o/, but in the case of both the mid vowels there are important allophones, namely [i] and [u] respectively.

6.60 From the ninth century on, however, the above system is further reduced, firstly by the merger of /o/ and /a/, which is reflected in the interchangeability of ⟨o⟩ and ⟨a⟩ spellings. The merger is particularly well demonstrated in ⟨-an⟩ for pa.ind.pl. *-on*, but other less frequent types include ⟨-on⟩ for the nominal inflexion *-an*, ⟨-a⟩ for the neut.pl. *-u*, ⟨-on, -an⟩ for the dat.pl. *-um*. Such variation only occurs sporadically in CP and Chron of the major EWS texts, but is much more frequent in Oros, see Bately (1980: xlv) for details and discussion. Typical examples of the less frequent types in Oros include: 54.29 *namon* acc.sg., 140.22 *nomon* dat.sg. ‘name’, 42.26, 56.17 *gæata* ‘gates’, 15.38 *scīpa* ‘ships’, *gēwealdon* (3×) ‘power’ dat. pl., 54.23 *ælcōn* ‘every’ dat.pl., 63.30 *gīfan* ‘gift’ dat.pl., 97.21 *gōdan* ‘good’ dat.pl. The same is true of ninth-century Kt texts, where ⟨-an⟩ is frequent in the pa.ind.pl. and other forms include Ch 1188.6 *gēmānon* ‘community’ dat.sg., 1482.71 *gēðinga* ‘agreement’ nom.pl., 1195.6 *fōðra* ‘load’ nom.pl., 1197.3 *willa* ‘I wish’, 1508.23 *sunu* ‘son’ dat.sg. (for *suna*), 1200.12 *dohtar* ‘daughter’, 1482.60 *alað* ‘ale’ gen.sg.

6.61 In LWS texts the picture is generally one of extension of the above interchangeability, and the same is true of the other dialects, although in late Kt and Merc texts the dat.pl. remains as *-um*, and the same is largely true of late Nbr texts.

6.62 Probably only shortly after the above merger began to take place the back vowel also began to become interchangeable in spelling with the unstressed front vowel /e/, thus beginning to show the gradual development of /ə/ as the principal unstressed vowel. In EWS Oros already has a few cases of, for example, ⟨-en⟩ for pa.ind.pl. *-on* and ⟨-on⟩ for subj.pl., although these examples should be seen in the light of the gradual morphological

loss of the subjunctive which proceeds *pari passu* with the phonological mergers. Other more clear-cut examples include ⟨-es⟩ for *-as* in 53.1 *bēames* ‘beams’, 90.25 *swicdōmes* ‘treasonable practices’, 44.12 *wealles* ‘walls’, ⟨-e⟩ for the gen.pl. *-a* in 54.7 *ǣrende* ‘news’, 97.11 *gēare* ‘years’, 4.14 *scīpe* ‘ships’, and a few others, see Bately (1980: xlvi). At the end of the tenth century the INbr texts LiGl, DurRitGl, and Ru2, together with the Merc Ru1, demonstrate merger of /a/ and /e/ in many inflexional endings, such as pr.ind.pl. *-eð* for *-að*, and indeed have the compromise spelling *-æð* in this and other inflexions. Otherwise the merger is not fully exemplified until the eleventh century, for example, Ch 1489.12 *hlēfdigen* ‘ladies’ dat.pl.¹

¹ Note also Beo 63 *-Scilfingas* gen.sg., 519 *-Rāmes* acc.pl.

VII Unstressed medial vowels

6.63 Where unstressed medial vowels either remained or developed in the period of the written texts, then these vowels were subject to processes of reduction and loss similar to those which have been described in the preceding sections. Two major processes may be discerned: (a) the reduction of unstressed vowels to /ə/; (b) the loss either of vowels which earlier had secondary stress after a heavy syllable or of unstressed vowels which had remained after a light syllable.

(a) *Reduction to /ə/*

6.64 In forms with two unstressed back vowels there is already a strong tendency in EWS and Ps(A), continued in later texts, for the first of these vowels to reduce to /ə/, as is evidenced by the spelling ⟨e⟩. Thus we find forms such as: *fugelas* < *fugolas* ‘birds’, *heofenas* ‘heavens’,¹ *heoretas* ‘deer’, *roderas* ‘heavens’, *weredum* ‘troops’ dat.pl.; *adesa* (< *adosa*) ‘adze’, *eafera* ‘son’, *nafela* ‘navel’; forms of weak class 2 verbs such as *gaderast*, *gaderode*, which may then be transferred to other forms, hence *gaderian* ‘gather’, similarly *stapelian* ‘establish’, *swutelian* ‘make clear’, etc.; the gen.pl. of *n*-stem nouns, such as *gumena*, but in Nbr and to a lesser extent Ru1 *-ana* remains frequent, note also CorpGl 687 *-doccana* ‘muscles’ gen.pl.; the inflected superlative of the type *-esta* (< *-osta*), such as *lēofesta*, although in this instance the best Ælfric mss. more often retain the earlier form *lēofosta*, otherwise less frequent in LWS. Similar retention of the back vowel in the superl. forms is also found in INbr texts. Further examples of this vowel reduction can be seen in the second elements of reduced compounds, for example, *fultemian* ‘help’, cf. *gaderian* above, *fraceþu*, *fraceþum* infl. forms of *fracop* ‘bad’, *Badenop*, where the reduced vowel is part of the first element.²

¹ The type of suffix variation found in *beofon*, *heofenas* is sometimes ascribed to the realm of derivational morphology, where rival forms with different suffixes are postulated, thus Campbell (1959: §§381–4). This is true for early examples of the alternation, such as CædH 1 *hefaen-*, but later examples are more likely to be due to the process described above. On the other hand, interchange of the fem. abstract suffixes *-ing*, *-ung* is essentially morphological, see also §6.51n2 for *-nes*, *-nis*.

² But frequent Nbr *hlāferdas* ‘lords’ is not due to the above, but is from the nom.sg. *hlāferd* < **hlāfweard* with monophthongization to */æ/ after loss of stress, see §6.30, and then merger of unstressed /æ/ and /e/ by §6.48.

6.65 An extension of this vowel reduction occurs when the unstressed back vowel is followed by a foot bearing secondary stress. This gives forms such as: GDPref3(C) 258.24 *aredlicor* ‘more quickly’, CP 137.18 *fraceðlecum* ‘shamefully’, *rūmedlice* ‘liberally’. Such forms are, however, mostly rather infrequent.

(b) *Loss of unstressed medial vowels*

6.66 Medial unstressed vowels occurred under the following conditions during the period of written texts: firstly, in open syllables if the original vowel was high and the preceding syllable light; secondly, in all contexts where the medial syllable was closed; thirdly, if the original vowel had remained long under secondary stress but that stress and the associated vowel length were later lost. All three types of unstressed vowel are subject to loss and are discussed separately below.

6.67 If the medial vowel is between a consonant and a resonant, then loss of the medial vowel is frequent, giving rise to forms such as *ætgedre* ‘together’, *betra* ‘better’, *micle* ‘much’, *yfle* ‘evilly’, *dyslic* ‘foolishly’ (< *dysiglic*, cf. *mihtelice*, §6.51), etc. and weak class 2 verbs of the type *medmian* ‘measure’, *opnian* ‘open’, derived from *medume*, *open*.¹ In most cases although these forms constitute a substantial minority of instances in EWS texts, they are almost completely avoided in Ælfrician texts, where *betera*, etc. is strongly preferred.²

¹ Note also BenR *Sætresdæg* ‘Saturday’ < *Sæteresdæg*.

² The same vowel loss occurs less commonly in a variety of other forms where the following consonant is not a resonant, although the preceding consonant often, but not always, is. The most frequent examples involve weak class 2 verbs of the types *efsian* ‘shear’, *orðian* ‘breathe’. Other types include: *culfre* ‘dove’, *heolfor* ‘gore’, *seolfor* ‘silver’, *heolstor* ‘darkness’, *balca* ‘balk’, *geolca* ‘yolk’, *circe* ‘church’, *pylce* ‘pelisse’, *betsta* ‘best’, *fyrsta* ‘first’, *smælsta* ‘smallest’, *winstre* ‘left’, *eġsa* ‘owner’, *eġþe* ‘harrow’, *miġþa* ‘urine’, EpGl, ErfGl 430 *sigdi* ‘scythe’, *fremde* ‘performed’.

6.68 The loss of medial vowel is further extended to forms which are disyllabic in uninflected positions. In such cases the resonant must

precede the vowel which is lost, and hence we find: *cyln* ‘kiln’, *fīrn* ‘crime’, *myln* ‘mill’, *þyrl* ‘hole’, all with loss between two resonants, and *meolc* ‘milk’, *seolc* ‘silk’, *weolc* ‘whelk’, *clerc* ‘clerk’, *fald* ‘fold’, OccGl 28.75 *ard* ‘quick’, *orþ* ‘breath’, *warþ* ‘shore’, *heort* ‘hart’, *byrs* ‘chisel’, *mersc* ‘marsh’. These forms are usually less common than the disyllabic originals, but note that *hwelc* ‘which’, *swelc* ‘such’ always show loss of the vowel, presumably because of their non-lexical status and occurrence in weak stress positions.¹ The same is perhaps less plausibly true of *twelf* ‘twelve’.²

¹ Perhaps occasional *pylc* ‘such’ belongs here, rather than under §6.70.

² On the other hand the occurrence only of *dalc* ‘clasp’, *eln* ‘ell’ is probably accidental.

6.69 There are a few cases where an unstressed vowel is lost after a short syllable and before a consonant group. These are: *æfst* ‘envy’, quite common in EWS alongside *æfest*, also in some LWS texts,¹ LWS *bern* ‘barn’ (< *berern*), *cynɡ* ‘king’, increasingly common from the time of Ælfric, note also MtGl(Ru1) 2.3 *king*, LWS *ofst* ‘haste’ and its related verb *efstan*, *world* ‘world’, common after the time of Ælfric, also INbr.

¹ But the word seems not to be used by Ælfric.

6.70 When medial vowels which had originally been long and in secondary-stressed syllables lost their length and stress, then they were potentially subject to loss by syncope after a heavy syllable. Such syncope is particularly associated with later texts, although some EWS examples are found, and this is no doubt due to the chronology of stress loss. The phenomenon is most frequent where the medial vowel is in an open syllable. Typical examples here include the vowel of the agentive suffix *-ere*, for example, Byrm1 14.21 *bōcra* ‘scholar’ gen.pl., 172.12 *scēawre* ‘observer’, the suffix of comparative adjectives from adverbs, such as *æftra* < *æftera* < *æfterra* ‘latter’, and similarly others, such as *inra* ‘inner’, *ūtra* ‘outer’, the similar form *ōþre*, *ōþra* ‘other’ (already in EWS), and various other suffixal vowels, such as *dēoflic* ‘devilish’, Lev 3.1 † *hēafre* ‘heifer’ (in Bosworth and Toller, 1898: *hēabfore*). Occasional forms of *bismrian* ‘revile’, *fultmian* ‘help’ in both EWS and LWS also belong here, but may be usefully compared with the forms in §6.67n2.

6.71 The above syncope is occasionally extended to medial vowels in closed syllables, examples being *æmtig* ‘empty’, commoner than *æmettig*, and late *geærndian* ‘send a message’ and forms (rare), *fulht* ‘baptism’ and derived forms, such as *fulhtere*, *gefulhtnian*, *hætse* ‘witch’ (< *hægtesse*).^{1,2,3}

¹ Note also Ch 856.5 *Hencstes* for *Hengestes*.

² There are a few forms which show more extensive reduction, often precursors of shifts in ME. Typically such examples show loss of both vowel and the preceding consonantal onset. The earliest such example is Ps(A) *nōht* 'nought' beside *nōwiht*, and later forms of the same word and its positive are (*n*)*āht*, (*n*)*āubht*, the latter simply with /wi/ > /u/, *nāteshwon* 'not at all' < **nāwihteshwōn*. Other examples are: *ālpī(ġ)* 'single' < *ānlīpiġ*, *heardra* 'mullet' < *heardhara*, *wāpman* 'man' < *wāpenman*.

³ Similar to the late changes in n2 above are the loss of genitival *-es* in occasional LWS *Sæterndæg* 'Saturday', or the loss of the vowel only in JnGl(WSCp) 5.30 † *Þursdæg* (Bosworth and Toller, 1898: Þūr) 'Thursday', Ch 1494.1 *Cēolsiġe*.

Old English consonants

7.1 After the operation of the various Germanic and Inguaeonic sound changes discussed in Chapter 4, the consonant system of the ancestor of Old English had developed as follows:

	<i>Labial</i>	<i>Dental</i>	<i>Palatal</i>	<i>Velar</i>
Voiceless stops	/p/	/t/	–	/k/
Voiced stops	/b/	/d/	–	–
Voiceless fricatives	/f/	/θ/	–	/x/
Voiced fricatives	–	–	–	/ȝ/
Sibilants	–	/s/	–	–
Nasals	/m/	/n/	–	–
Liquids, approximants	–	/l, r/	/j/	/w/

Of these phonemes all could occur as geminates except the approximants /j, w/.¹

¹ But geminate /ff/ was extremely rare, see §2.58.

7.2 Significant allophones of these phonemes are found especially for the voiced stops and the velar fricatives. The phoneme /b/ occurred as a stop consonant only initially, in gemination, and after nasals, occurring as a voiced fricative, presumably bilabial, medially and final when single. Conversely, the phoneme /ȝ/ occurred as a voiced fricative only initially, medially and finally, but occurred as a voiced velar stop in gemination and after nasals. For the phoneme /x/ we find not only the voiceless velar fricative, but also, in initial position, [h], the result of lenition in PrGmc, see §4.3. In W̄Gmc, see §4.17, the fricative allophones of /d/ had already become stops, and therefore only the single allophone [d] can be reconstructed.¹ Amongst other allophonic variations which should be noted the most important

concerns /n/ which assimilated in place of articulation to a following consonant and therefore had a velar allophone [ŋ], see also §7.3n2.²

¹ The reconstruction of proto-OE phonemes is difficult and controversial. For contrasting views and discussion see firstly Kuhn (1960) and Moulton (1954, 1972).

² It is also likely that /l/ had both ‘clear’ and ‘dark’ allophones, the latter occurring in the environment of a back vowel or consonant. Evidence for this suggestion comes from first fronting and breaking, see §§5.15, 16, and probably from the behaviour in Gmc of weak class 2 verbs without medial *-i-* in the preterite, such as *cwellan*–*cwealde* ‘kill’, see further Prokosch (1927), Hogg (1971).

7.3 Examples of the principal allophonic variations are as follows.¹ /b/ was realized as [b] in the following positions: **bindan* ‘bind’, **habbjan* ‘raise’, **lamb* ‘lamb’; and as [β] in **ziban* ‘give’, **zab* ‘he gave’. /ɣ/ was realized as [ɣ] in the following positions: **ziban*, **drazan* ‘draw’, **droz* ‘he drew’; and as [g] in: **saz3jan* ‘say’, **sin3an* ‘sing’. /x/ was realized as [h] in **xana* (= *hana*) ‘cock’, and in all other positions as [x]. /n/ was realized as [ŋ] in **san3* ‘he sang’, and in all other positions as [n].²

¹ Minor details of reconstruction, such as inflectional endings, are ignored in the examples below.

² Presumably /n/ was realized as palatal [ɲ] when directly followed by /j/, for example, **kumnjæ* ‘race’ d.s. But all such cases would show gemination, making precise phonetic specification extremely difficult.

I Dissimilation

7.4 At a very early stage in proto-OE, final consonant clusters containing two continuant consonants dissimilated, with the first of the two consonants becoming the corresponding stop. The first of these consonants was usually a voiceless fricative (but see §§7.9 and n2, 11 for examples possibly involving voiced fricatives), whilst the second of these consonants was either /s/ or the resonants /l, m/. Since the cluster /θs/ was subject to assimilation rather than dissimilation, for example, **bliþs* > *bliss* ‘bliss’, dissimilation before /s/ was confined to the clusters /fs, ks/, for example, **wæfs* > *wæps* ‘wasp’, **foxs* > *foks* (= ⟨fox⟩) ‘fox’, see §2.51 for the regular use of ⟨x⟩ for /ks/. If the second of the two consonants was either /l/ or /m/, then the first consonant was /θ/, for example, **seþl* > *setl* ‘seat’, **boþm* > *botm* ‘bottom’.¹

¹ There are a number of regular exceptions to this second change and also some dialectal variation. For both see §§7.10ff.

7.5 The phonetic features of the dissimilation or assimilation before /s/ are quite simple. Firstly, as can be seen from the examples above, any

voiceless fricative is subject to change before /s/. Secondly, the only conditioning factor is the place of articulation of that fricative. If the fricative is dental, like /s/, then assimilation occurs, otherwise occlusion to the corresponding voiceless stop occurs. The change may therefore be characterized approximately as follows:

$$\left[\begin{array}{c} \text{C} \\ +\text{cont} \\ -\text{voic} \\ \langle +\text{cor} \rangle \end{array} \right] > \left\{ \begin{array}{l} [-\text{cont}] \\ \langle +\text{strid} \rangle \end{array} \right\} / \text{---} \left[\begin{array}{c} \text{C} \\ +\text{cont} \\ +\text{strid} \\ +\text{cor} \end{array} \right]$$

7.6 Examples of the shift of */xs/ > /ks/ are particularly numerous, typical examples being: *oxa* ‘ox’ (**oxsa* > *oksa*), *lixan* ‘shine’, and, with breaking, *feax* ‘hair’, *meox* ‘manure’, *Seaxe* ‘Saxons’, *six*, *syx* ‘six’, *weaxan* ‘grow’. Occasional *weahsan* and forms, found in CP(H), are not significant, cf. Or *geahsian* and forms for *geacsian* ‘discover’, indicating a merely orthographic variation.¹ LWS also shows a number of examples where /xs/ clusters due to vowel syncope are dissimilated to /ks/, such as *hēxta* ‘highest’, *nēxta* ‘next’, less commonly *sixt* ‘thou seest’ and similar forms. For further discussion of these see §7.9. The shift does not always take place when a further consonant follows /s/, and instead /x/ is lost, for example, **wæxstm* > *wæstm* ‘fruit’. No doubt the reason for this is that the triple consonant cluster was regarded as over-heavy and therefore /x/, the weakest member of the cluster, was lost. But there is some variation, for example, regular *wrixlan* ‘exchange’, and ErfGl 1147 *dixl*, 1043 *dixlum*, CorpGl 205 *-þixl*, 2007 *þixlum* ‘axle’ against EpGl *dislum*.²

¹ Amongst other spelling variations we may note CP(C) 252.17 † *æxbe* (also *ÆLet* 2.167), which Cosijn (1888a: §131) aptly describes as due to ‘schreiberpedanterie’.

² *Nēosian* ‘visit’ may perhaps be explained by early loss of /x/ between voiced segments, cf. however *lixan* where such loss does not occur.

7.7 In the earliest Merc glossaries there are still examples of /fs/, thus EpGl 526 *raefsed*, ErfGl *refset*, CorpGl 1084, 1087 *raefsit* ‘reproved’,¹ CorpGl 603, 859 *waefas*, 2098 *uaefasas*, EpGl 1071 *waeffsas*, all texts showing ⟨ps⟩ spellings also. Elsewhere, however, ⟨ps⟩ spellings are regular. But /fs/ remains where it is the result of syncope, as in *drifst* ‘thou drivest’, which may be the result of analogy, see Campbell (1959: §418), or imply that the change was earlier than syncope, see further §7.9. Examples of the assimilation of */θs/ > /ss/ are *blīss* ‘bliss’, *līss* ‘gentle’,² and, after syncope, *cwist* ‘thou sayest’ (< **cwiðst*).³

¹ Note also EpGl 523 *raefsid* with ⟨b⟩ for [f] or, possibly, [p]. But by this time Gmc *[β] would have developed to *[f] before *[s], and there is no evidence to support the

view of Sturtevant (1931: 191–2) that *ps* developed from a voiced fricative whilst *fs* always remained.

² The vowel of *blīss*, *līss* is of uncertain length, see Campbell (1959: §286).

³ Alongside such forms are found the etymological spellings *blīðs*, *līðs*, presumably from the adverbs *blīðe*, *līðe*, and clearly analogical *cwiðst*, etc., from which is found Alc(Warn 35) *cwetst* (2x), this a twelfth-century ms. I can find no trace of the oft-quoted † *snīst* ‘thou cuttest’.

7.8 The major morphological alternations involved in this sound change occur when an inflexion beginning with a consonant is added to the stem. In such cases one might expect loss of /x/ rather than dissimilation to /k/, cf. *wæstm*. The retention of /x/ and consequent dissimilation in forms such as WS *syxta*¹ ‘sixth’ and some forms cited in §7.6 may therefore be due to the influence of simple forms such as *six*, *syx*. But it should be noted that the development in such cases is generally irregular and some non-analogical explanation may be available.

¹ Ru1 has MtGl 27.45 *syxta*, 20.5 *sextan*, and Nbr regularly has *sextig* ‘sixty’, Li *sesta* ‘sixth’, probably implying that the situation there was not radically different from that in WS.

7.9 The changes discussed above are found in NGmc and also, for */xs/ > /ks/, in OFris.¹ This might imply a very early date for the change. However it is notable that in forms such as *feax* (§7.6) breaking occurs. Since breaking occurs before /x/ but not before /k/, see §5.16, this entails dissimilation being later than breaking. Furthermore, the ⟨fs⟩ spellings in the early Merc glossaries would suggest that the change had only recently occurred at the time of the completion of the archetype. The relative infrequency of the change when the consonant cluster is due to syncope, see §§7.6–7, is perhaps best accounted for by supposing that by that time the tendency to dissimilate had greatly weakened, and there may be no need to suggest that *drīfst*, etc. are due, solely at least, to analogical pressure. Assimilation of */θs/ may be assumed to have taken place at the same time, at least in *blīss*, *līss*, and there is no necessity to suppose intervocalic voicing, as in Campbell (1959: §§481.2).² It seems most probable, therefore, that these changes took place between the period of breaking and that of syncope, perhaps at much the same time as *i*-umlaut. On the other hand forms such as *hēxta*, cited in §7.6 show that the change occasionally persisted to a much later date.

¹ For possible examples in other Gmc languages, see Luick (1914–40: §634A1 and references).

² There is also no necessity to assume, as implied by Campbell (1959: §481.2), that assimilation of */θs/ > /ss/ was later than devoicing of voiced fricatives before /s/. It is possible that the fricative was voiceless in Gmc, although the etymology of the suffix remains obscure.

7.10 Dissimilation before /l/ or /m/ is more restricted, dialectally less widespread, and less regular. The only fricative which is dissimilated is /θ/, see §7.4, although this may be due to the absence of final [fl, fm, xl, xm] clusters rather than some phonological restriction on the dissimilation.¹ In terms of dialect the change is restricted to WS, hence alongside the forms *setl*, *botm* cited in §7.4 we find Angl *seðel*, **boðm* (> ME *bothem*).² The regularity of the change is disrupted in two further ways. Firstly, there are examples such as *fæðm* ‘embrace’, *mæðl* ‘talk’ where the fricative always remains, except in the circumstances outlined immediately below. Since *fæðm* is mainly, and *mæðl* exclusively, poetic, these examples may be Merc borrowings and certainly seem indicative of interference from some other (sub-)dialect. The explanation of Campbell (1959: §419) seems to rest upon an implausible view of OE syllable structure. Secondly, there is a possible development by which, at least before /l/, the fricative is lost and the preceding vowel is lengthened in compensation. Clear examples of this occur before /l/ only in *mǣl* ‘talk’, *mǣlan* ‘to talk’, *stǣlan* ‘impute’.³ The phonological environment in which this sound change takes place, therefore, is somewhat obscure, and it is difficult to suggest a plausible yet simple characterization of the change. It should be noted especially that /l, m/ do not form by themselves a natural phonological class.

¹ If it is assumed that fricatives do not occlude before /n/, as implied by forms such as *hræfn* ‘raven’, then it must be supposed that *bytne* ‘keel’ and forms, cf. CorpGl 389 *bythne*, is merely a variant of *bytme* derived after rather than before the time of dissimilation, note however Nbr *hædna*, discussed in §7.14.

² For the competing Angl forms *seðel* ‘seat’ and *setel* ‘episcopal seat’, see Campbell (1959: §420n4). On the possibility of dissimilation in Angl *botl*, **bōtl* (> Bootle, etc.), see Ekwall (1917a) and, for criticism, Campbell (1959: §420n5).

³ Possibly to be included here is *stǣl* ‘place’, if the form ever has a long vowel, cf. nom.pl. *stalu* with short vowel and Toller (1921: *stǣl*).

7.11 Examples of dissimilation of /θl, θm/ > /tl, tm/ after a short vowel include: **boðl* > *botl* ‘dwelling’, *bytla* ‘builder’, *bytme* ‘keel’. After a long vowel, however, the development is to /dl, dm/, and it may be supposed that in these cases there was an early voicing of the fricative between a long vowel and /l, m/, so that the change is /ðl, ðm/ > /dl, dm/.¹ Thus we find examples such as **āðl* > *ād̄l* ‘disease’, *nǣdl* ‘needle’, *mīdl* ‘horse’s bit’, *wǣdla* ‘beggar’, *wīdl* ‘impurity’. But there are forms without voicing, hence *spāt̄l* ‘spittle’,² *wǣtla* ‘bandage’.³ As after the short vowel, there is normally no occlusion in Angl, where the regular development retains the fricative, for example, Ps(A) 102.3 *āðle*, MkGl(Li) *āðlo*. Similarly WS has several forms where occlusion does not occur, such as *ǣðm* ‘breath’, *mǣðm* ‘treasure’, paralleling the examples after short vowels cited in §7.10. Evidence for dissimilation before /r/, not otherwise found, comes from *ǣdr* ‘vein’, also found in Kt in OccGl 49.107, 330 *ēdra*.

¹ Alternatively one might suggest that the fricative remained unvoiced but not occluded until after the time of voicing between voiced segments. Then occlusion would have to have occurred after such voicing. But this poses equal chronological difficulties, see further §7.12.

² In Nbr we find JnGl(Li) 9.6 *spādle*, repeated in Merc JnGl(Ru1) 9.6, see §7.14.

³ But this word could have a short vowel, see OED *wattle* sb.¹

7.12 The most probable chronology of this process of dissimilation would be that it occurred at the same time as dissimilation before /s/, see §7.9. That dissimilation is normally to /t/ rather than /d/ presupposes that the change is earlier than intervocalic voicing of fricatives and hence also before syncope, see §7.58. For this reason the forms discussed in §7.11 are best explained by supposing that there was indeed special voicing after a long vowel which occurred earlier than normal intervocalic voicing.

7.13 As seen above, in Angl dialects the sequence /θl/ normally remains, but in WMerc there is a special later development by which /θl/ is metathesized to /lθ/ with, apparently, immediate occlusion to /ld/. Ps(A) has *seld* ‘seat’ frequently alongside *wēðla* ‘pauper’, 102.3 *āðle* ‘illness’.¹ The existence of such unmetathesized and unoccluded forms demonstrates that the occlusion was dependent upon the metathesis and not vice versa. Metathesized forms are continued into the later ms. Hatton 116 (LS 3 Chad), where they exist alongside the normal LWS forms, for example, *seld* (4×), *setl* (3×). The use of such forms in poetry, thus Beo *bold* ‘dwelling’, *seld*, is no doubt Merc in origin, and there is no need to assume that the change was dialectally more widespread, see Vleeskruyer (1953: §41).²

¹ Note also CorpGl 814 *weardseld* ‘guardhouse’.

² The place-name element *bold* also appears to be of Angl origin, see Smith (1956: 45).

7.14 In the absence of any of the changes discussed above, §§7.10–13, then the sequences /θl, θm/ are affected by a more wide-ranging shift in IOE by which the fricative [ð] (< [θ] by intervocalic voicing, see §7.54) develops to a stop before any liquid or nasal. Often such forms have not yet appeared by the time of Ælfric, but the following may be noted: ÆCHom I 29 420.21 *mādmās*, II 4 36.218 *mādmfatu* ‘treasure’, and, due to compounding, *ēadmod* ‘humble’ and forms (c.80× in ÆCHom against *ēadmod* c.15×).¹ The same phenomenon occurs freely in INbr, where alongside *āðlo*, see §7.11, we find in Li *ād̄l* ‘illness’, *bydle* ‘cultivator’, *nēdl* ‘needle’, *sedl* ‘seat’, see §7.10n2, *spādle*, see §7.11n2, *widliġa* ‘defile’, note MkGl(Li) 7.23 *wīðlað*. Nbr texts show evidence of this change where the consonant cluster is due to syncope, notably in Ru2 *ōēdle* ‘earth’ dat.sg. (4×) (< **ōēðile*) and frequent Li *hēðna* and forms ‘heathens’, where occlusion is before /n/.

Occlusion of [ð] is also found in the Merc Ru1, for example, *ādle*, *nēdle*, *sedle*, *ēadmod*, but elsewhere in Merc the change is rarely found.²

¹ Examples with occlusion before /l/ are difficult to find in WS. The best examples, perhaps, are ByrM 1 46.1 *þrȳdlice* ‘powerfully’, Beo 2862 *þrȳdlicost* superl.

² Ps(A) 73.21 *ēadmod* may simply be due to the frequent substitution of ⟨d⟩ for ⟨ð⟩ in that ms.

II Palatalization and assibilation

7.15 In the ancestor of OE there existed only one palatal consonant, namely /j/, see §7.1. However, at a very early stage in the history of English the velar consonants */x, ɣ, k/ and their allophones became sensitive to an immediately adjacent front vowel or the approximant /j/, so that in the first instance the palatal allophones *[ç, j, c, ʝ] arose, where [ʝ] is the result of the palatalization of the *[g] allophone of */ɣ/.¹ This change affected geminate consonants equally, that is, *[xx, kk, gg] > *[çç, cc, ʝʝ].² In the case of the fricatives no further development took place, except that the voiced palatal fricative merged with the approximant /j/, if the two were ever distinct, see Hogg (1979b: 103–4). However, the palatal stops eventually developed into voiceless or voiced affricates, for example, *[c] > /tʃ/, > *[ʝ] > /dʒ/, similarly *[cc] > /tʃʃ/, *[ʝʝ] > /dʒʒ/. For full details of this latter change, usually called assibilation, see §§7.33ff. The change of palatalization, although widespread in OE, is poorly represented in texts, for ⟨h, c, g⟩ were used, by and large, indifferently for palatalized and unpalatalized forms. In mss. the only common method of distinguishing the two is the use of diacritics, especially ⟨e⟩ before a back vowel to show a preceding palatal, as in *sceōp* ‘poet’, *sēcean* ‘visit’, but only in the case of ⟨e⟩ in unstressed syllables, mainly restricted to EWS, can we be certain that it is being used diacritically, see §§2.65, 80, 5.59–70.³ Other evidence, however, comes from runic texts, where ‘c’ was often used for palatalized /k/, ‘k’ for unpalatalized /k/, ‘g’ for palatalized /ɣ/, ‘g̃’ for unpalatalized /ɣ/, see §2.68n1. Evidence for the change also comes from its interaction with other changes, especially palatal diphthongization, see §§5.47ff., and from its development in later stages of the language, for example, PDE *church* and many other words with reflexes of the OE palatals.⁴ Here the common practice of indicating palatalized /ɣ/ and /k/ by means of a superscript dot is employed, see §2.65 for full details. Typical examples of palatalization are as follows: (1) *[x] > [ç]: **hleaxxjan* > *hlihhan* ‘laugh’, WS **seoxið* > *sihð* ‘he sees’;⁵ (2) *[ɣ] > [j]: **yellan* > *gyllan* ‘yell’, **siyi* > *sige* ‘victory’, **dæy* > *dæg* ‘day’; (3) *[k] > [c]: **kīdan* > *ċīdan* ‘chide’, **sōkjan* > *sēcan* ‘seek’, **dīk* > *dīc* ‘ditch’; (4) *[g] > [ʝ]: **liggian* > *liċgan* ‘lie’.

¹ It is clear from later periods that *[x] is subject to palatalization, although in somewhat restricted contexts. See §§7.16n8, 26, and Campbell (1959: §442).

² There are, of course, no examples of palatalization of *[ʃy], since in this position /ʃy/ was realized as a geminate stop, see §7.2.

³ Forms such as *secean* are not only principally EWS, but even there predominate only in CP. However, the absence of ⟨e⟩ does not necessarily indicate the presence of a velar consonant. It is worth noting that in LWS the use of diacritic ⟨e⟩ is more often, but only occasionally, found in forms such as *čyrcean* ‘churches’, where analogy from the nom.sg. *čyrce* would be likely. Diacritic ⟨e⟩ is equally uncommon in LWS to indicate a palatalized velar stop, as in *licgan* ‘lie’. For other spellings which indicate palatalization, see the examples in §§7.19–22.

⁴ But the PDE situation can be misleading, both because of loan-words and/or Scandinavian influence, such as PDE *gate* ≠ *geat*, and because of analogical developments. There are also forms which have always had /j/, such as *gēar* ‘year’. A useful discussion of this point is to be found in Lass and Anderson (1975: 136–7).

⁵ For the question of whether palatalization preceded loss of medial /x/ or /x/ was analogically restored in forms such as **seoxið*, see §7.26.

(a) Palatalization

7.16 In general outline the phonetics of palatalization are as follows. Initially a velar consonant was always palatalized before a front vowel,¹ for example, **kīdan* > *cīdan*, **yellan* > *gyllan*, **kæster* > *cæster* (> *ceaster*) ‘city’. Medially a velar consonant was always palatalized before /i/ or /j/, for example, **sōkjan* > *sēcjan*, **sīyi* > *sige*, but before /æ/ only velar fricatives were affected, so that we find **dæyæs* > *dægæs* ‘day’ gen.sg., but *blæces* ‘black’ gen.sg.masc., *āces* ‘oak’ gen.sg. without palatalization.³ Similarly velar fricatives were palatalized medially after any front vowel provided that a back vowel did not directly follow, for example, **reyn* > *reġn* ‘rain’, **næyl* > *næġl* ‘nail’, **fæyr* > *fæġyr* ‘fair’, but *stīgan* ‘climb’,⁴ *wegas* ‘ways’, without palatalization. In the same positions the velar stops are palatalized only after /i/, and provided that a back vowel did not directly follow, for example, *dīces* ‘ditch’ gen.sg., *micel* ‘much’, but *dīcas* ‘ditches’, *ġelīcung* ‘liking’, because of the following back vowel, and *æcer* ‘acre’,⁵ because the preceding vowel was not /i/.^{6,7} Other examples of palatalized stops in medial position were normally due to analogical pressures, see §§7.41–2. Finally all velar consonants were palatalized after /i/, for example, **dīk* > *dīc* ‘ditch’, **hwælik* > **hwælic* > *hwelc* ‘which’ (similarly *swelc* ‘such’, cf. also *ġelīc* ‘like’), **wīy* > *wīġ* ‘war’. After nonhigh front vowels, however, only the velar fricatives are palatalized, for example, **dæy* > *dæġ* ‘day’, **mæy* > *mæġ* ‘relative’, but *frec* ‘bold’, *bæc* ‘back’ without palatalization.⁸ This apparently confusing state of affairs can be clarified in two ways. Firstly, it is important to note that palatalization appears to have been partly dependent upon syllable structure, for the majority of the cases listed above can be subsumed under one condition: namely that a velar consonant was palatalized provided not only that it was adjacent to a front

vowel or /j/, but also that it was in the same syllable as the palatalizing segment. This obviously accounts for all cases of the palatalization of an initial consonant. The situation with regard to palatalization of medial consonants is more complex, presumably because such consonants were regularly ambisyllabic in OE, see §2.81. Most cases, however, are accounted for by permitting any appropriate adjacent vowel to cause palatalization, provided that it is in the same syllable, where the palatalized consonant is ambisyllabic. The contrast in behaviour between forms such as **sōkjan* > *sēcan* and **dīkas* > *dīcas* must then be accounted for by assigning priority to the vowel of the second syllable rather than that of the first. The palatalization of final consonants is quite straightforwardly accounted for by the above analysis; nevertheless, some problems remain, and most of these can be resolved by noting that the velar stops are more resistant to palatalization than the velar fricatives. Initially, as has been stated, all velar consonants palatalized, but medially and finally velar stops only palatalized if the segment causing palatalization was either /i/ or /j/, for example, *æcer*, *bæc*, where the velar stop remained, see n3. We may therefore suggest that palatalization was a change by which all velar consonants were palatalized when adjacent to and in the same syllable as either /i/ or /j/ and that velar fricatives were also palatalized when adjacent to and in the same syllable as any front vowel, the same wider environment also causing initial velar stops to be palatalized. The change can therefore be characterized approximately as follows:⁹

$$\left[\begin{array}{c} \text{C} \\ \langle \text{-cont} \rangle_a \end{array} \right] > [-\text{back}] / \left\{ \begin{array}{l} \langle \# \rangle_b \text{ — } \left[\begin{array}{c} [-\text{cons}] \\ [-\text{back}] \\ \langle +\text{high} \rangle_c \end{array} \right] \\ \left[\begin{array}{c} \text{V} \\ [-\text{back}] \\ \langle +\text{high} \rangle \end{array} \right] \text{ — } \left\{ \begin{array}{c} \# \\ [+cons] \\ [-back] \end{array} \right\} \end{array} \right\}$$

Condition: if *a* then either *b* or *c*.

¹ Or before any diphthong whose first element was front, that is any normal OE diphthong, for example, **ȝæf* > *ġeaf* 'he gave', **kīusan* > *ċēosan* 'choose'. Since the rule is that it is the element of the diphthong which is adjacent to the consonant which is crucial, and since the second element of any normal OE diphthong was back, palatalization only took place when the element which would cause the change was a following diphthong, and never took place when that element was a preceding diphthong, for example, unpalatalized *bēag* 'he bent'.

² Instances of unstressed /e/ were rare, see §6.46 for discussion, but there is no reason to suppose that the behaviour before /e/ was any different from that before /æ/.

³ This account was first fully developed by Morsbach in a footnote to Björkman (1900–2: 147–9), but many writers, such as Luick (1914–40: §637.2, 3), Campbell (1959: §§428–9, 435), have claimed that velar stops were palatalized under the same circumstances as velar fricatives. In order to explain later forms, such as ME, PDE

acre, *back*, etc., these writers must then claim that in such words the palatal consonant reverted to a velar at the time of assibilation. In favour of such a position are three arguments. Firstly, some words show unexpected assibilation in later periods, the best examples being ME *frech* 'eager', see OED *freck* a., Ormmulum *obacch* 'aback', neither of which is easily explained on other grounds. But other ME forms, such as *batch* 'batch loaf', *smatch* 'taste', *thatch*, *wlach* 'luke-warm', may be from verbs with palatalization, for example, **bæccan* 'bake', cf. Nbr *wæccā* 'wake' > PDE *watch*. See further the discussions in Ekwall (1921), Flasdieck (1923), Luick (1914–40: §685A1). Secondly, there are some occasional spellings, especially in Li, such as *bæcg* (3×), *bæcc* (2×), *gebræcg* and variants 'broken', which could be interpreted as indicating palatalized forms, see Bülbring (1902: §495A2), but ⟨cg⟩ appears to be merely a variant for ⟨cc⟩, occurring also in MtGl(Li) 23.4 *bæccum* dat.pl. where palatalization is unlikely. Thirdly, there is an argument that /k/ would be palatalized in an exactly parallel fashion to /ɣ/, first stated by Bülbring (1902: §495). But this argument is purely theoretical and can carry no great weight. Phonetically and phonologically the fricatives would have been more likely to palatalize than the stops, *pace* Luick (1914–40: §637A5), cf. also Lass and Anderson (1975: 143–4) for a different explanation of the same phenomenon, especially given the prior existence of /j/ in OE. Nevertheless it may well be worth entertaining the possibility that the situation was by no means as clear-cut as the presentation here suggests, and that there was rather more variation in the palatalization of stops than has been suggested, most especially in medial position, see Brunner (1965: §206) for a valuable discussion.

⁴ Lass and Anderson (1975: 144) suggest that */ɣ/ was palatalized in forms such as *stīgan*, on the grounds of ME *stye*. But it is more probable that the ME form is due to analogical processes, see §§7.40–2.

⁵ Here *-e-* is a parasitic vowel before word-final /r/, see §§6.38–40.

⁶ *Picce* 'thick', *mirce* 'murky' do not have palatalization because at that time /w/ still followed the velar stop and hence prevented the change, see Luick (1914–40: §637A4) and cf. *Myrce* 'Mercians'.

⁷ *Čicen* 'chicken' appears to have velar [k] medially, given MtGl(Ru1) 23.37 *čiken*, see §7.21. This is best explained by dissimilation, see Campbell (1959: §438n1), although it is doubtful if the same explanation can be applied to ME *caffinch* 'chaffinch', as suggested by Ritter (1910).

⁸ By 'finally' in the previous sentence I intend syllable-finally, or preconsonantly after a vowel, rather than word-finally. Therefore there are many words which show palatalization of */ɣ/ in syllable-final position after a front vowel, such as *brēgdan* 'brandish', *mægden* 'maiden', *riġnan* 'rain', *sægde* 'he said', or where only a consonant follows, such as *brægd* 'twisted', *sægd* 'said', and other similar past parts. Palatalization of /x/ (> [ç]) was especially frequent in such positions, for example, *cniht* 'boy', *riht* 'right'. In the case of the velar stop palatalization would take place syllable-finally only after /i/, hence *liĥoma* 'body', *riĥne* 'powerful' acc.sg.masc. But in this latter case it would appear that there was a strong tendency for palatalization to fail, or at some later stage for the palatal stop to revert to a velar stop, see §§7.25, 30. *Bicnan* 'beckon' < **bēacnjan* is not a parallel example, since there the velar stop was never in contact with /i/ and so always remains.

⁹ For the phonology of palatalization, see §§7.27–32.

7.17 Four further phonetic issues arise with respect to palatalization. These are: (1) the phonetic status of */ɣ/; (2) palatalization in clusters; (3) palatalization of geminates; (4) palatalization of */sk/. Each of these issues is discussed separately below.

- (1) In §§7.15–16 it was assumed that forms such as *gyllan* were due to palatalization of *[ɣ] and further that palatalization of *[g] resulted in [j], see also §7.17(2), (3) below. This assumption is based on the claim that the allophones of /ɣ/ were originally distributed as follows: a voiced velar fricative in all positions except in gemination and after nasals, where a voiced velar stop occurred, see §7.2. But some writers have assumed that by the time of palatalization */ɣ/ had already developed in initial position, at least, to a stop, thus Luick (1914–40: §633), Lass and Anderson (1975: 134). Since it is clear that in all positions except in gemination and after nasals the palatalization of /ɣ/ resulted in the fricative /j/, this would mean that a development of the type: *[ɣ] > *[g] > *[j] > [j] would have to have occurred in words such as *gyllan*, see Luick (1914–40: §696), but this seems implausible, see further Hogg (1979b: 93–6), and the development of */ɣ/ > [g] must therefore be placed later than palatalization.
- (2) When a velar consonant occurred finally after /i/ or /j/ but preceded directly by a nasal, then palatalization still occurred. The only examples involve either *[k] or *[g], since /nx/ clusters did not occur, see §§3.13–15, and */ɣ/ was realized as *[g] after nasals, see above. Typical examples of this change, therefore, are *drinc* ‘drink’ imp., *ping* ‘thing’, *bring* ‘ring’.¹ No doubt /n/ here acquired the palatal allophone [ɲ] from the preceding /i/ and this was then carried over to the velar stop.^{2,3}
- (3) The behaviour of velar consonants in gemination was identical to that when single and medial, although, of course, only *[xx, gg, kk] occurred, see §7.15. Typical examples are: **hleaxxjan* > *hlibhan* ‘laugh’, **liggjan* > *licgan* ‘lie’, **strækkjan* > **stræccjan* (> *streccan*) ‘stretch’. From the point of view of syllable structure the first element of a geminate presumably belonged to the first syllable, the second element to the second syllable. Therefore it has to be assumed that it is the second element which palatalized and that the first element assimilated to the second. Note that forms such as *sticca* ‘stick’ did not palatalize, since the second element of the geminate was adjacent to and in the same syllable as a back vowel. Although the first element was similarly placed with respect to /i/, assimilation here would appear to work only from right to left, see Lass and Anderson (1975: 146–7).
- (4) Palatalization of *[sk] applied far beyond the usual limits, where typical examples are: **skip* > *scip* ‘ship’, **skæl* > **scæl* (> *sceal*) ‘he shall’; **dwæskjan* > **dwæscjan* > *dwæscan* ‘extinguish’, similarly *wýscan* ‘wish’; **disk* > *disc* ‘dish’, **fisk* > *fisc* ‘fish’.⁴ Beyond these limits palatalization can also be found initially before back vowels, for example, *sceacan* ‘shake’, *sceoh* ‘shoe’, medially in any environment except an immediately following back vowel, for example, *þersce* ‘I thresh’, *disces* ‘dish’ gen.sg., but *þerscan* ‘thresh’, *discas* ‘dishes’ without palatalization.⁵

Finally palatalization of *[sk] occurred after any front vowel, not only /i/, hence forms such as *æsc* ‘ash’, but after back vowels the position is more obscure.⁶ Especially noteworthy are instances of initial *[sk] followed directly by /r/ rather than a vowel, for these appear also to have been palatalized, for example, *scrincan* ‘shrink’, see further §7.37. The phonetics of this behaviour are quite unclear. Perhaps the probable alveolar (or even prepalatal, see Bülbring, 1900a, and §2.62) quality of /s/ created a greater tendency towards palatalization, for it is difficult to see how otherwise the shift in forms such as *sceacan*, *æsc*, and perhaps even *disc* could be explained, since */k/ would not be contiguous to a front vowel and therefore not in an environment leading to palatalization. The failure of palatalization in *berscan*, *discas*, etc. is then best explained by ambisyllabification of /s/, so that /s/ and /k/ were no longer in such direct contact as to permit the change, see here n5. Furthermore, although it is clear that */sk/ eventually developed into /ʃ/ by assibilation, the intermediate stages of the development are obscure. Many opinions have been expressed, but none seems to have any outstanding merit, see further §7.37.

¹ Presumably the same explanation would apply to inflected forms of *finč*, etc., for example, *finčes*, *bringes*, as to inflected forms of *dīč*, etc., e.g. *dīčes*, see §7.16. Note here EpGl 410 *bringiae* dat.sg., where ⟨gi⟩ = ġ. Forms such as *englisc* ‘English’ do not show palatalization of *[g], since neither the stop nor the nasal are in contact with /i/. For such forms see §7.17.4 and n4.

² The suggestion that the same happened if a liquid intervened relies on forms such as *byrġ* ‘cities’, *bilġ* ‘belly’, both of which had at the time of palatalization an immediately following /i/, and *felġ* ‘felloe’, which probably had a formation parallel to that of *bilġ*, is unnecessary.

³ In RuthCr 44 ‘kyniŋc’ ‘king’ ‘ŋ’ must therefore indicate palatal [ɲ] rather than velar [ŋ].

⁴ But these and similar words may be subsumed under the more general condition of palatalization of *[sk] after any front vowel, see below.

⁵ Two exceptional forms are *bisċeop* ‘bishop’, *cūscute* ‘cushat’. The most likely explanation is that the second syllable had secondary stress, thus Luick (1914–40: §691A2), and that this secondary stress prohibited ambisyllabification of /s/ so that the *[sk] sequence would behave as if it were word-initial. In support of the postulation of secondary stress may be mentioned the unusual LWS spelling *bisċeop* with diacritic ⟨e⟩ in an apparently unstressed syllable, a particular characteristic of ÆLS, although absent from ÆCHom, see also §2.68. It should also be noted that *cushat* (= ‘wood-pigeon’) is Northern, esp. Sc., and might therefore be expected to show /sk/, see §7.42.

⁶ Thus, for example, whilst PDE *tusk* would imply unpalatalized OE *tusc*, frequent ME and dialectal PDE *tush* would imply palatalized *tusc̄*. It seems probable, therefore, that although palatalization of *[sk] was less likely finally after back vowels, it did occur with some frequency.

7.18 Palatalization is one of the most widespread of the OE changes and occurs in a very large number of words of all classes. But, see §7.15, it is

poorly represented in the OE spelling system. In §§7.19–22, therefore, only a few interesting spellings, mainly from early texts, are cited. Further examples can be found in §§7.33ff., and for an indication of the widespread character of the change see, for example, the lists in Luick (1914–40: §637) and Campbell (1959: §§427–9, 440).

7.19 In EWS the palatalization of the voiced velar fricative *[ɣ] was spelled with great regularity ⟨g⟩, for example, *geat* ‘gate’, and was not distinguished from Gmc */j/, for example, *gēar* ‘year’, or the unpalatalized velar fricative¹ of *gāt* ‘goat’. For discussion of the value of ⟨ge⟩ spellings see §§5.59–60.² The situation was similar in LWS. In all cases, however, initial /j/ in loan-words was normally transcribed by ⟨i⟩, for example, *Īudan*, *Īudas*, etc. ‘Jews’. In the early Merc glossaries also the normal spelling for the sound was ⟨g⟩, but note ErfGl 263 *iāces*, CorpGl 380 *iēces* (= *gēaces*, see n4 below) ‘cuckoo’, EpGl, ErfGl 958 *iesca* ‘hiccough’, cf. CorpGl 1865 *gesca*, both words having initial /j/, and EpGl, ErfGl 947 *bōdæi* ‘body’,³ EpGl, ErfGl 473, CorpGl 981 *grēi* ‘grey’, for final /j/. CorpGl 850 *grēig*, 2093 *seiġn* ‘sign’ show ⟨ig⟩, more probably an attempt to indicate the palatal consonant than to show a diphthong, see n3 and 2.39. The later Ru1 also has a number of forms with initial ⟨i⟩, such as MtGl(Ru1) 22.4, 8 *iara*, *iare* ‘ready’ and related forms,⁴ 10.5 *iongaþ* ‘journey’, see n5. Nbr regularly used ⟨g⟩, but in early texts ⟨i⟩ was also used, for example, BDS 3 *hiniongae* ‘departure’,⁵ but later ⟨ge, gi⟩ spellings may indicate palatal diphthongization, see §5.62. In INbr spellings such as *ðeiġn* ‘thane’, cf. above, occasionally occur.⁶ Kt texts show rather more frequent use of ⟨i⟩ than other texts, especially post-vocally, for example, Ch1195.7, 1510. *dei* ‘day’ (5×), CollGl 49.274 *wæi*, 276 *wei* ‘weighed’, *wrēi* ‘accuse’ imp., and before another consonant 1203 *meiden* ‘girl’, 12 *swæið* ‘he sounds’.

¹ For the shift of the initial unpalatalized velar fricative to a stop, see §7.68, also §7.17(1).

² The odd spelling CP(H) 57.9 *kelēd* ‘led away’ can be no more than a scribal error.

³ Since *bōdæg* later developed to *bōdiġ* through **bōdeġ*, a development only affecting unstressed /æ/ before /j/, see §6.52, this implies that ⟨æi⟩ did not represent a diphthong, see further §7.69.

⁴ Alongside more frequent *gearwe* and forms. It must be assumed that the substitution of ⟨i⟩ for ⟨g⟩ involved only orthographic loss of following ⟨e⟩ in order to avoid the unacceptable sequence ***ieare*, for if the following vowel were back palatalization would not have occurred. *iara*, etc., therefore, are not examples of retraction rather than breaking, *pace* E. M. Brown (1891: §5b), see also §5.31. The same explanation holds for ErfGl *iāces*, see above, which is therefore not an example of stress shift in diphthongs, *pace* Pfeifer (1974: §40).

⁵ With /j/ from the pa.ind. *gēong* ‘he went’.

⁶ Such forms are also infrequently found in LWS, for example, ÆCHom I 128.10 *ðeiġnas* ‘thanes’.

7.20 The palatalization of the voiceless velar fricative *[x] was spelled identically to that of its unpalatalized partner, that is, ⟨h⟩, and there are no orthographic means of distinguishing the two.

7.21 When the voiceless velar stop was palatalized, then the normal spelling was ⟨c⟩, as for the unpalatalized stop. Hence are found both *cēn* ‘torch’ and *cēne* ‘keen’. Palatalized forms before back vowels were often distinguished, however, by diacritic ⟨e⟩, for example, *sēcean* ‘seek’, see §2.68 for other such spellings, also §7.15n3 and, for possible attempts to show assibilation, §7.34. Although the use of ⟨c⟩ is therefore consistently ambiguous, it is noteworthy that the alternative and rarer spelling ⟨k⟩ was, where used, generally restricted to representations of the velar stop. It may be, therefore, that spellings such as CP(H) 105.13 *cēak* ‘cheek’ genuinely indicate a palatal stop (or, more probably by that time, an affricate, see §7.36) initially and a velar stop finally. Hence any other such occasional spellings, for example, CP(H) 411.18 *æker* ‘field’, also found in various charters, may confirm absence of palatalization in specific environments, here after a front vowel other than /i/, see §7.16. Other similar forms in EWS include: CP(H) 163.8 *ēakiað* ‘they increase’, 467.13 *murkien* ‘they might grieve’, both weak class 2 verbs, see §7.24, and 329.19 *ðicke* ‘thick’, see §7.16n5. In LWS texts of the Ælfrician period use of ⟨k⟩ was extremely rare, but it was most often used where the distinction between palatal and velar is crucial, for example, ÆLS 12.60 *kicenan* ‘kitchen’ acc.sg. In the early Merc glossaries ⟨k⟩ was not used, and the only spelling of special interest is EpGl, ErfGl 792 *birciae* ‘birch’ < **birkjæ*, see §7.17n2, with diacritic ⟨i⟩ before a front vowel. Ru1 has a particularly frequent use of ⟨k⟩ for the velar stop, note especially *bōkera* and forms ‘writer’ (19×) alongside *bōcera* (3×) and *bōc* ‘book’ (4×), see further Bülbring (1899). Amongst the Nbr texts Ru2 has a particularly high number of ⟨ch⟩ spellings, but they were used for both the palatalized, such as *stenches* ‘stench’ gen.sg., and the unpalatalized, such as *folches* ‘people’ gen.sg., sounds, see Bülbring (1898: 75), Lindelöf (1901: §134). Similar spellings occur occasionally in Li, notably *mech* ‘me’ (4×), but there too they seem to be without significance. In Kt ⟨c⟩ was the regular spelling. In gemination the normal spelling throughout was ⟨cc⟩, see §2.66, no distinction being made between palatalized and unpalatalized forms.

7.22 The voiced velar stop *[g] occurred only after nasals and in gemination, see §7.17(2), (3). When palatalized after a nasal the normal spelling remained ⟨g⟩, often with diacritical ⟨e⟩ before a back vowel, note also EpGl 410 *bringiae* with diacritical ⟨i⟩ before a front vowel, see §7.17n1. There are occasional ⟨cg⟩ spellings in both early and late texts, for example, *cynincġ* ‘king’,¹ and note RuthCr 44 ‘kyniŋc’. The palatalized geminate was spelled ⟨cg, gg⟩, see §2.67.

¹ *Cyninċġ* is especially frequent in *ÆLS*, where it occurs almost as often as usual *LWS* *cyning*.

7.23 It is difficult to detect in OE texts any dialectal variation in palatalization, especially in view of the existence of spellings in such early N texts as *RuthCr* which unambiguously point to palatalized consonants.¹ There were, however, cases where the interaction of other dialectally variable sound changes resulted in dialectal contrasts with regard to palatalization. Most notable of these is the contrast between *ea*-dialects and *a*-dialects, see §5.15, where the former have palatalization in words such as *WS* *ġealla* ‘gall’, *ċeald* ‘cold’, the latter do not have palatalization, thus *Angl* *galla*, *cald*.

¹ Gevenich (1918) was the first to demonstrate that palatalization was a general OE change. Although her work can be subject to some criticism, see Ekwall (1919), but cf. Smith (1956: 86), and although there have been later attempts to show that there was dialectal variation, such as Watson (1947), these are generally unsuccessful, and her conclusions remain by and large sound. See further, however, §7.42.

7.24 Morphologically palatalization is one of the most important changes in OE, because it serves as a differentiating factor between several paradigmatic classes. Also, in conjunction with the later change of assibilation it was exceptionally prone to analogical levellings and extensions which have a lasting effect on the history of the language. Such analogical processes are discussed below under assibilation, see §7.40–2, and here only the class-differentiating features are discussed. Amongst nouns and adjectives palatalization serves to distinguish the following classes. Firstly, *ja*- and *jō*-stem nouns (and adjectives) show palatalization in disinction to their *a*- and *ō*-stem counterparts. Typical examples are: *læċe* ‘physician’, *ġefylċe* ‘troop’ against *lāc* ‘war’, *folc* ‘folk’; *sprāċi* ‘speech’ against *racu* ‘narrative’. Secondly, original *i*-stem nouns show palatalization, as in *heġe* ‘hedge’, also occasionally in very late texts *heċġ*, a *jō*-stem, see Dahl (1938: 85), *stenc* ‘stench’, against *sorg* ‘sorrow’, *rinc* ‘man’. Amongst verbs palatalization was a primary characteristic of weak class 1 verbs, such as *bġgan* ‘bend’, *sengan* ‘sing’, *weġgan* ‘move’, *īċan* ‘increase’, *drencan* ‘drench’, *streċċan* ‘stretch’. In this they contrast with weak class 2 verbs which always lack palatalization, such as *swugian* ‘be silent’, *syngian* ‘sin’, *macian* ‘make’, *ascian* ‘ask’, *teobhian* ‘consider’.¹ For allomorphic variation within paradigms see §§7.41–2.

¹ Naturally the weak presents of strong verbs also show palatalization, for example, forms of *liċgan* ‘lie’, *hlihhan* ‘laugh’, as do the weak class 3 verbs *hyċgan* ‘think’, *seċgan* ‘say’.

7.25 In view of the fact that palatalization occurred in OFris as well as OE, see Steller (1928: §§40–4), it might seem reasonable to suppose that

the Gmc velars had already acquired a tendency to assimilate to a neighbouring front vowel at a very early stage, thus Campbell (1959: §426). Yet forms such as *galan* ‘sing’, *calan* ‘cool’, cf. *gealla*, *cēald* (§7.23), which are due to restoration of *a*, see §§5.35–40, show that even if this tendency was very early, a palatalized consonant could revert to velar if the neighbouring front vowel became back. We must therefore suppose that palatalization was a sound change which occurred, or, perhaps – see, however, §§7.30–2 – was phonologized, not earlier than the time of restoration of *a*.¹ Palatalization did not take place before front vowels caused by *i*-umlaut, hence *gylt* ‘guilt’, *cyning* ‘king’, *gēs* ‘geese’, *cēne* ‘keen’, *gālan* ‘hinder’, *cæg* ‘key’, which only necessarily implies that palatalization preceded *i*-umlaut in those cases where the following vowel is /æ(:)/, see §7.30. It is much more certain that palatalization must have preceded second fronting, for front vowels which are the result of that sound change did not cause palatalization, for example, **gætu* ‘gates’, **cæfurtūn* ‘hall’, see §5.91. Although the evidence of *i*-umlaut and second fronting apparently shows that velar consonants could no longer become palatal by the time of the full implementation of these changes, medially and finally palatalized consonants could still revert to a velar articulation at a later stage, more particularly after the time of syncope, thus we find examples such as *sēcð* ‘he seeks’, against *sēce* ‘I seek’, but see for further discussion §7.30–2. At this point, however, it is safe to conclude that palatalization was a change later than restoration of *a* and earlier than second fronting.

¹ If Angl *cald*, against WS *cēald*, were due to retraction instead of breaking, rather than due to failure of first fronting before covered /l/, this would demonstrate that palatalization was later than breaking/retraction. But since that seems to be the less acceptable explanation, see §§5.10–13, the relative chronology of breaking and palatalization cannot be independently ascertained. Yet all the other evidence makes it unambiguously clear that palatalization was later than breaking.

7.26 In §7.51 it is argued that lenition of /x/ was a sound change roughly contemporaneous with smoothing, and that loss of medial [h] followed almost immediately. On these grounds, therefore, it must be assumed that those sound changes were later than palatalization. The consequence of this assumption is that medial /x/ must have been subject to palatalization in the same circumstances as its voiced counterpart, for example, in **fæhið* ‘he paints’, see §7.46, but normally all such instances would then be lost. The only cases which would be phonologically retained are in gemination, as in *hlihhe* ‘I laugh’, or before a consonant, as in *cnihht* ‘boy’. For the former the normal LWS spelling of the root vowel is ⟨i⟩ rather than ⟨y⟩, confirming the following palatal consonant, see §5.167.¹ For the latter the position is more complex, since the evidence of palatal umlaut would suggest that the consonant was palatal only if a back vowel did not follow the

consonant cluster, hence *cnihht* but pl. *cneohtas*, see §5.113. In other cases, where /x/ was restored analogically, such as *sihð* ‘he sees’, the probable development was that medial /x/ would first be palatalized, then lenited and lost, and then analogically restored, once more as a palatal, see n1 below.

¹ ME spellings such as *lauhwen*, *lauzwen* very clearly indicate a velar fricative. But it is important to note that palatalization of /x/ produced [ç] which was merely an allophone of /x/, see §7.28. Unlike the results of palatalization elsewhere, therefore, the palatal consonant was always free to revert to a velar if its environment changed. Thus the ME forms above. Elsewhere, however, the ME developments were those proper to palatal fricatives, see Jordan (1974: §§196, 198).

(b) *Phonological issues*

7.27 The phonology of palatalization raises several complex issues, with respect both to the phonemic status of the relevant sounds and to the chronology of the changing phonology. By LWS, however, the results of the various developments are clear: (1) the voiceless velar fricative /x/, when palatalized, became and remained a palatal allophone of the velar fricative, that is, [ç] ⊃ /x/; (2) the voiced velar fricative /ɣ/, when palatalized, merged with the pre-existing phoneme /j/ < Gmc *j/; (3) the voiceless velar stop /k/, when palatalized, eventually underwent phonemic split, which created the new phoneme /*tʃ/, perhaps in the first instance /c/; (4) the voiced velar stop [g], an allophone of /ɣ/, when palatalized, eventually underwent phonemic split, which created the new phoneme /dʒ/, perhaps in the first instance /j/. As can be seen, the phonology of the fricatives and of the stops is radically different, but the voiceless and voiced stops follow a parallel development. The details and consequences of these phonological developments are discussed in §§7.28–32; for the phonology of the palatalization of /sk/ see §7.37.

7.28 When the voiceless velar fricative /x/ was palatalized, then in the first instance, as with the velar stops, see §§7.30–1, the new palatal fricative [ç] would be merely an allophone of /x/, occurring only in those environments where palatalization took place, /x/ itself would only freely occur medially and finally, being already [h] initially, see §7.2, and [h] was, of course, not subject to palatalization. Shortly after palatalization /x/ was lenited and then lost when medial and single, so that it only remained medially when geminate and finally or when analogically restored. The distribution of [ç] and [x] remained complementary throughout the period and later, see §7.26 and n.

7.29 When the voiced velar fricative /ɣ/ was palatalized, the resulting sound appears to have been, or very quickly become, identical to Gmc *j/, so that, for example, no distinction existed between the initial consonants

of *ġeat* 'gate' < **ȝæt* and *ġēar* 'year' < **jǣr*. It is difficult to assess the value of ME evidence which seems to show that /j/ from whatever source could revert to a velar when in the environment of a back vowel, hence spellings in Orrmulum such as *lezhenn*, *wrezhenn*, see Luick (1914–40: §373A5). The discussion in Jordan (1974: §190) would rather suggest a crucial role for analogy. Whatever the case, the evidence cited by Jordan clearly indicates that the voiced velar fricative had undergone phonemic split as a result of palatalization.

7.30 If, as argued in §7.26, palatalization occurred before and up to the time of *i*-umlaut, then in the first instance the palatal stop [c] would remain as an allophone of the original velar phoneme /k/, occurring initially before any front vowel, but medially or finally only when adjacent to /i, j/ but not adjacent to a back vowel, see §7.16. The velar allophone [k] would occur elsewhere, for example, *cū* 'cow', *climban* 'climb', *dīcas* 'ditches', *āc* 'oak'. But with the operation of *i*-umlaut both [c] and [k] could come to stand before a front vowel. In the cases of the *i*-umlaut of */u(ɪ)/ and */o(ɔ)/, the new front vowels would be distinct from /i(ɪ)/ and /e(ɛ)/ until they were unrounded, the former vowel starting to become unrounded no earlier than the EWS period, see §§5.170–1, 175, the latter starting to become unrounded, in WS at least, before the time of the earliest texts, see §5.77. Thus examples such as *ċen* 'torch', **cōēne* 'keen' would not demonstrate contrastive distribution, that is, a phonemic split, until unrounding of **cōēne* > *cēne*. But in the case of *i*-umlaut of */(ɑ:)/, the immediate result would be that the new front vowels would merge with the existing phonemes /æ(ɛ)/, thus creating the potential for a phonemic split between [c] and [k], for example, *ċēac* 'cheek' v. *cǣġ* 'key'. Although full minimal pairs are hard to find,¹ this sub-part of *i*-umlaut would appear to be an important step in the creation of palatal stop phonemes, see Penzl (1947: 41–2), also Hogg (1979b: 100–2). In medial position there appear to be examples where, as noted in §§7.16n8, 7.26, when a palatal stop came to be followed immediately by a consonant, as a result of syncope, then the stop reverted to a velar. Thus we find **sōkið* > **sōēcið* > WS *sēcð* 'he seeks', where syncope has occurred, against Angl *sōēceð* without syncope. This, unambiguously a phonological development, may best be explained by reference to syllable phonotactics and a reasonable assumption that clusters containing two coronal stops would not be permitted in OE. There would occur, therefore, a process of dissimilation and the palatal stop would revert to a velar. Thus such forms do not, as they at first appear to do, contradict the relative chronology discussed above.²

¹ Perhaps the best pair is Nbr *cæfertun* 'hall' v. WS *ċeafer* 'beetle' (with palatal diphthongization). But the dialect differences, difficult as they are, are insignificant compared with many other problems in determining the status of the several variant forms of each of these words.

² For PDE forms such as *seek, think, work*, which also appear to contradict the above chronology, see the discussion in §7.42.

7.31 Similar facts hold for the palatalization of [g] as for the palatalization of [k], except, of course, for the more restricted distribution of [g], see §7.27. This has one important consequence, however, for it means that palatalized [j] and velar [g] can only contrast medially when geminate and medially and finally after a nasal, there being, of course, no examples of either initially. In fact it would appear that there are no minimal pairs to demonstrate the contrast, and from the phonological point of view there may be no necessity to postulate a phonemic split, which may only be able to be justified, if at all, on grounds of phonetic distance. For various later forms with /g/, especially dialectal, which apparently contradict the relative chronology, such as *brig, eg, rig* for *bridge, edge, ridge*, cf. §7.30n2, see the discussion in §7.42.

7.32 The discussion in §7.25 makes it clear that it is most probable that palatalization of initial vowels was earlier than *i*-umlaut. However, the phonological features discussed in §§7.28–31, although they do not contradict this relative chronology, also make it most probable that palatalization was only phonemicized at a later stage, after the time of *i*-umlaut. The same is suggested by failure of *i*-umlaut in cases such as *dæg*, discussed in §5.86. Since palatal diphthongization only occurred when an initial palatal consonant preceded a front vowel, see §5.48, the above proposal that palatalization occurred before the time of *i*-umlaut is consistent with the probability that palatal diphthongization also preceded *i*-umlaut. For the relative chronology of palatalization, smoothing, lenition, and syncope see §7.50–1.

(c) *Assibilation*

7.33 The evidence of §§7.28–31 clearly demonstrates that the phonological behaviour of the palatalized stops was quite different from that of the palatalized fricatives. Phonetically the same is true, for the evidence of later periods of the language shows that the palatal stops eventually became the palato-alveolar affricates /tʃ, dʒ/, for example, PDE *child* < *cild*, *bridge* < *brycġ*. Similarly palatalized [sc]¹ became /ʃ/, for example, PDE *ship* < *scīp*. The change as it affected the palatal stops not immediately preceded by /s/ appears to have taken place irrespective of environment, occurring wherever a palatal stop was found as a consequence of palatalization.² Typical examples of the change are as follows:³ (1) initially: *cild* > *čild* ‘child’, *ċēn* > *čēn* ‘torch’, *ċeaster* > *čeaster* ‘castle’; (2) medially: *ċiriċe* > *čiriċe* ‘church’, *miċel* > *mičel* ‘much’, *streċċan* > *strečċan* ‘stretch’, *cyċġel* > *cyčġel* ‘cudgel’, *senġan* > *senġan* ‘singe’; (3) finally: *diċ* > *dīč* ‘ditch’, *finċ* > *finč*

‘finch’, *ečġ* > *ečġ* ‘edge’. Particularly important, however, are examples where a stop other than a palatal (thus, a stop not the result of palatalization proper) developed into an affricate. This only happened when a dental stop was immediately followed by /j/, as in *fetian* (= /fetjan/) > *feččan* ‘fetch’, **midġern* > *mičġern* ‘fat’, dial. *midġen*, see OED *midġern*. Such examples show that the sequences /tj, dj/, but not /ti, di/, cf. weak class 2 *hatian* ‘hate’, *bodian* ‘announce’, could coalesce to produce a palato-alveolar affricate. Since dental and palatal consonants form the class of coronal consonants, it may be inferred that the formation of affricates, generally known as assibilation, was due to the coalescence of a sequence of coronal stop + /j/. In order for this to be the case, however, it has to be assumed that the palatal stops developed a glide also, so that they had the form [c], [j], or, preferably, [c̥], [j̥]. This, however, is a quite common linguistic phenomenon, which stems from the difficulty of articulating palatal stops, see for example Ladefoged (1982: 148), and it is therefore reasonable to assume such a shift. The development of coronal stop + /j/ to an affricate is extremely common, and indeed repeated at later stages in the history of the language, see especially Wells (1982: 247–8), who calls the later change ‘Yod Coalescence’.

¹ As stated in §7.17(4), see further §7.37, the intermediate stages in the shift */sk/ > /ʃ/ are obscure and difficult. [sc], therefore, is intended as no more than a mnemonic to indicate the stage reached after the time of palatalization.

² Writers who claim that palatalization of */k/ was as general as palatalization of */x/, see §7.16n3, must then suggest that assibilation failed to take place when the palatalized stop was not directly adjacent to /i/ or /j/ (except initially), hence *æcer* ‘acre’, etc. But such a restriction is unnecessary given the account of palatalization presented in §7.16.

³ In these sections on assibilation, that is, §§7.33–9 only, affricates are distinguished from palatal stops by the use of superscript ‘̥’, that is, č̥, ġ̥.

7.34 It was not usual for OE scribes to distinguish in any unambiguous way the above development of affricates, which were normally represented in exactly the same way as the palatal stops from which they developed. Amongst individual exceptions to this may be noted EpGl 657a *merze*, CorpGl 1304a *mertze* ‘trading dues’ < Lat *merx*, where ⟨z, tz⟩ could indicate an affricate, see §2.65n1.¹ It is also possible that some of the more complex variants of ⟨cg⟩ found in EWS, such as CP(H) 327.16 *ġebyġčġean* ‘buy’, see §2.67n1 and Cosijn (1888a: §135), were confused attempts to represent a complex phoneme. All the above cases are, however, of little significance.

¹ It is unlikely that EpGl, ErfGl 123 *r(a)edisnae* ‘bunches of grapes’ is an additional example, cf. Pheifer (1974: §71) for the opposite view.

7.35 Thus the most important examples are those demonstrating assibilation of dental stop + /j/. So LWS usually has *feččan* and forms ‘fetch’ beside

mainly poet. *fetian*, and *fečč(e)an* is already found in Or (3×, never *fetian*).¹ LWS also regularly has *orčearđ* ‘orchard’ against CP(H) 293.2 *ortġearđ*.² In the case of the voiced dental, *mičġern* ‘fat’ occurs in a few late glosses, whilst **midġern* is unattested.

¹ Examples are lacking in CP.

² Also note CP(H) 381.12 *orcġearđ*, described by Campbell (1959: §434n2) as ‘a copyist’s error of a common type (*c* for *t*)’. ÆGram † *cræfca* ‘workman’ must be doubtful alongside usual *cræfta*, surely not a scribal error, despite Campbell (1959: §434) following Sievers (1891: 328), for another view see Borowski (1924: 17–18).

7.36 The relative chronology of assibilation is highly controversial, a natural consequence of the fact that the change involved is almost solely phonetic in effect, with the single exception of the assibilation of [tj, dj]. However, spellings of the type *fečč(e)an* began to appear already in EWS texts¹ alongside mainly poet. *fetian* which may be taken to represent an earlier stage, and they were usual in LWS. This suggests that the affricate pronunciation started to predominate by at the latest the beginning of the ninth century, at least in the case where it developed from a dental stop + /j/. Doubtless the palatal stop + /j/ developed into an affricate at the same time. It is unlikely that much weight can be attached to the early spelling *mer(t)ze* cited in §7.35, and since assibilation must be later than palatalization it is in any case impossible to suggest a date for assibilation earlier than that of syncope, see §7.32.² If this is so, then it must be noted that assibilation in forms such as *sēčan* ‘seek’ is not due to the /j/ which originally caused palatalization, since that /j/ was lost by syncope. Rather one must assume a development approximately as follows: **sōkjan* > **sōčjan* (palatalization) > **sēčjan* (*i*-umlaut) > **sēčjan* (by §7.33) > **sēčan* (syncope) > *sēčan* (assibilation).

¹ The earliest example is the ninth-century Mart 5.656 *ġefeččean*.

² The view expressed here is parallel to that of Bülbring (1902: §493), Luick (1914–40: §687), Campbell (1959: §486), Brunner (1965: §206A9). An alternative view, expressed summarily in J. Wright and Wright (1925: §309), much more extensively in van Langenhove (1930), but originating with Sweet (1888), not only must deny the validity of the *feččan* type as evidence, but also is rendered vacuous by the failure to take into account the fact that the shift was generally purely phonetic and without phonemic consequence. Of course a precise chronology can never be obtained, but general phonological principles would suggest an earlier rather than a later date for the development of affricates.

(d) *Assibilation of [sc]*

7.37 As stated in §7.17(4), palatalization of **/sk/* far surpassed the normal limits of the change, occurring initially always, medially except when a

back vowel directly followed, and finally after any front vowel. Typical examples in each position are given in §7.17(4), but one important type must be emphasized here. These are examples such as *sc̄rincan* ‘shrink’, *sc̄rēawa* ‘shrew’, *sc̄rūd* ‘shroud’, whose later development shows that */sk/ palatalized even before a consonant. This confirms the suggestion that /s/ could in itself have a palatalizing effect on */k/, and that it only failed to have such an effect when a syllable boundary intervened. These examples more particularly make it clear that the assibilation which eventually resulted in /ʃ/ is unlikely to have followed the same path as the assibilation of palatal stops not after /s/, for the postulation of a sequence **/scjr-/ is scarcely plausible. Perhaps it is most likely that a gradual assimilation of [s] and [c] took place, first in manner of articulation to give *[sç], then in place to give [ʃ].¹ It is necessary also to note that in the first instance the result of this shift was the geminate consonant [ʃʃ], which naturally always simplified in initial position and would also simplify finally in accordance with the general OE process of degemination, see §7.80. But medially a geminate remained, as quantitative shifts in ME show.² From the phonemic point of view, of course, [ʃ] and [ʃʃ] were merely allophones of /ʃ/, since they were in complementary distribution.

¹ For other views see Luick (1914–: §691A1), and on the impossibility of a firm conclusion on the matter Brunner (1965: §206A10).

² Otherwise one must accept the view of Jordan (1974: §181) that /ʃ/ could be lengthened after a short vowel. This is difficult to accept, and the assimilation processes described above lead much more naturally to the existence of geminate [ʃʃ]. Flasdieck (1958) is an important review of the whole matter, with extensive references to further material.

7.38 Orthographically the only frequent indicator of the palatalization and then assibilation of */sk/ was the use of diacritic ⟨e⟩ before a back vowel, for example, *s̄ceolon* ‘they shall’, *s̄ceort* ‘short’, *s̄ceādan* ‘divide’. Such usage was most frequent in LWS, see §§5.65–70 for details and discussion of possible indications of palatal diphthongization of back vowels. In INbr the gloss of the Prologue and Headings to Matthew has three ⟨s(c)h⟩ spellings: MtProl(Li) 8 *sh̄ya* ‘shadow’, 17 *bis̄ch̄ead* ‘distinction’, DurRitGl 3.21 *s̄ch̄yldo* ‘debts’. It is difficult to determine the significance of these spellings, which are scarcely of the same status as ⟨sh⟩ spellings in mss. of the twelfth century, where ⟨s, ss⟩ are also found, see Foley (1903: §41), Schlemilch (1914: 52).

7.39 No doubt the relative chronology of palatalization of */sk/ is approximately parallel to that of the other palatalizations. The dating of assibilation is, as elsewhere, rather more difficult, see §7.36. However, the failure of metathesis to occur in forms such as *as̄cē* ‘ashes’, cf. *ascian*, *axian* ‘ask’,

where unpalatalized /sk/ > /ks/, would imply that the palatalized cluster had, by the time of metathesis, become so closely joined together that metathesis could not take place. Since the union of the two segments was probably part of the assimilation process involved in assibilation, see §7.37, and since metathesis of /sk/ is a change best evidenced in LWS, see §7.96, this would imply that assibilation was well under way during the tenth century. It seems likely, therefore, that assibilation of [sc] > /ʃ/ was a process which ran alongside assibilation elsewhere.

(e) *Morphophonology*

7.40 In §7.24 the consequences of palatalization as it served to distinguish various morphological classes were discussed. But palatalization and consequent assibilation also played an extremely important role in the rise of allomorphic variation. The most widespread type of allomorphy arose when a palatal consonant alternated with a velar consonant because of the presence of a directly following back vowel in various inflected forms. These are discussed in §7.41(1). Somewhat similar cases arose when syncope of an unstressed vowel caused an originally palatalized consonant to become velar, and these are discussed in §7.41(2). In §7.41(3) allomorphic variation involving initial consonants, a feature of certain strong verb classes, is discussed. The consequences of such allomorphic variation and processes of analogical levelling and extension are discussed in §7.42, together with a number of cases where dialectal variation appears to be the crucial factor, rather than analogy.

7.41 (1) Allomorphic variation between a palatalized and an unpalatalized consonant was particularly frequent in the following cases: *a*-stem masc. and neut. nouns; *ō*-stem fem. nouns; fem. and neut. weak nouns; athematic nouns; parallel forms of (strong) adjectives.¹ In both masc. and neut. *a*-stem nouns the final consonant of the nom.sg. was followed by zero or a front vowel in the sg., but by a back vowel in the pl. Typical examples of such nouns where a palatal or affricate might therefore be expected in the sg. but a velar in the pl. are: *dæg* ~ *dagas* 'day', *dīc* ~ *dīcas* 'ditch',² *līc* ~ *līcum* dat.pl.³ 'body'. The situation in fem. *ō*-stems differed principally only in that short-stemmed nouns had *-u* in the nom.sg., cf. *gīfu* 'gift', *lāru* 'learning', elsewhere a front vowel followed finally in the sg., a back vowel in the pl. A typical example of the variation in such nouns is *sorg* ~ *sorġe* acc.sg. 'sorrow', but of course nouns with the voiceless stop, such as *racu* 'tale', did not show the variation unless the root vowel was /i:/, as in *dīc*, see n2, infrequent in these nouns. For fem. and neut. weak nouns the variation existed in the nom.sg. (neut. also acc.sg.) against elsewhere,

so that we find *ēage* ~ *eagan* 'eye', note also *ċirice* ~ *ċirican* 'church', see §7.16. Amongst athematic nouns there is considerable variation with the gen.dat.sg. and nom.acc.pl. showing palatalization not present in the other forms, for example, *bōc* 'book', but gen.dat.sg., nom.acc.pl. *bēc*, and similarly *burg* ~ *byrg* 'city'.

- (2) Where syncope occurred resulting in the sequence of palatal consonant + inflexional dental consonant, for example, **sēcċ* 'he seeks', then, see §7.30, the palatal reverted to a velar, that is, *sēcð*. Consequently there were, especially in weak class 1, many verbs which would show a velar in all forms of the present except 2nd, 3rd sg.ind.⁴ This alternation, of course, would be largely confined to WS, but the converse arose in non-WS dialects amongst strong verbs, where the 2nd, 3rd sg.pr.ind. was not subject to syncope, for example, Angl *drincan* 'drink', *drinċeð* 'he drinks'.
- (3) Allomorphic variation in strong verbs occurred in initial position whenever the ablauting vowel varied between front and back, that is, in classes I, II, III, and certain class VII verbs. In class I a velar would be expected in pa.ind.sg., but a palatal or affricate elsewhere. Examples are rare, but note *ċīnan* ~ *cān* (etc.) 'gape'. In class II a palatal or affricate would also occur in the present, hence *ċēosan* ~ *ċēas* ~ *curon* ~ *coren*, 'choose', also *ċēowan* 'chew'. The situation in class III was more complex, but the present should always show a palatal, and the pa.ind.sg. a palatal except when a nasal followed, cf. *band* 'he bound', or in dialects where retraction rather than breaking took place. Usual WS examples are *gylđan* ~ *gēald* ~ *guldon* ~ *golden* 'pay', and similarly *gyllan* 'yell', *gylpan* 'boast', *ċeorfan* 'carve', but note Angl forms such as MtGl(Ru1) 17.24 *gald* 'he paid', see §7.25nl. Amongst class VII verbs variation exists in *gangan* ~ *gēong* 'go'.

¹ Adjectives are not cited below, since they follow exactly the same principles as in the corresponding paradigms of nouns. A further minor type may be found in *geatu* 'gates' from sg. *geat* (< **ġæt*). But the forms are ambiguous, see §5.50n1.

² *Dīc* may also be fem., but it will still show the same pattern of variation, because of the preceding /i:/, see below.

³ Since *līc* is a long-stemmed neut., the nom.acc.pl. will be *līc* with assibilation, final /u/ having been lost by syncope.

⁴ Such variation would not extend to the preterite because verbs whose root originally ended in a velar consonant formed their preterite without the connecting vowel *-i-*, hence *sōhte* 'he sought', *þōhte* 'he thought'.

7.42 With the degree of allomorphic variation noted in §7.41, it would be expected that there should also be considerable analogical levelling and extension. Following general principles of analogy, see Kuryłowicz (1949), we would expect the nom.sg. to predominate over plural forms in nouns,

and in strong verbs the present forms similarly to predominate over past forms. Thus we find examples in EWS and LWS such as *ċiriċean* ‘churches’, CP 273.8, 287.12 *eāġean* ‘eyes’, where ⟨e⟩ presumably indicates a palatal on the analogy of the singular. Amongst strong verbs there appear not to be clear-cut examples in OE, but the tendency is strong in later forms of the language, as in PDE *chosen* against OE *coren*. In the present tense of weak verbs the alternation type *sēcān* ~ *sēcð* is, as would be predicted, the source of later *seek*, cf. *beseech*, where the affricate has been extended, perhaps on pragmatic grounds, and so for other similar verbs, such as *think*, *work*. The failure of syncope in Angl forms such as *drinċeð* might equally be expected to lead to ***drinċh*, but there is no evidence that any such forms appeared. The explanation may be that either the palatalization was levelled away in a similar fashion to the levelling of *i*-umlaut, see §5.85(6), or that Scandinavian influence replaced such forms with a velar. It is certainly probable that Scandinavian influence is the source of PDE dialect forms such as *birk*, *brig*, *rig*, *steek*, *weg*, for usual *birch*, *bridge*, *ridge*, *stitch*, *wedge*, see Campbell (1959: §438) against Luick (1914–40: §690; 1935). Presumably this is also the explanation of PDE *carve* against OE *ċeorfan*, and similarly later /sk/ forms such as PDE *skin*, cf. OE *scīnn*, may be due to the replacement of /ʃ/ by /sk/ in areas of Scand influence or by substitution of the native word by the Scand one, here ON *skinn*. In this way OE/ME /tʃ, ðʒ, ʃ/ could be equated with Scand /k, g, sk/, and the later distribution of place-name forms, notably *-chester* v. *-caster*, is a helpful indicator of the limits of Scand influence. The existence of such influence, however, does not necessarily contradict the position of §7.23 and *n* that palatalization was in the first instance a general OE phenomenon.

(f) *Conclusion*

7.43 Finally it is doubtful that it will ever be possible to obtain a clear and sustainable picture of all the factors involved in OE palatalization and assibilation, because of the lack of orthographic evidence, the complex morphophonology, and later influences, especially Scand. The most difficult areas are undoubtedly the dialectal spread of palatalization and assibilation; the later reversions to velar articulations either by analogy or through Scandinavian influence; and the issues of chronological dating.

III Development of fricatives (i): lenition

7.44 As discussed in §§7.1–3, the ancestor of OE contained the following fricatives: *[f], *[β]; *[θ]; *[s]; *[x], *[ɣ]; *[h].¹ Only in the case of the velars was there a clear phonemic contrast between voiceless and voiced

fricatives, for dental *[ð] had already developed to *[d] in WGmc, see §4.17, and labial *[β] was an allophone of */b/, see §7.2. But a complication arises with the labials, where relatively rare medial *[f] should have become voiced (> *[v]) by Verner's Law, hence *þurván 'need'. Before the time of the Gmc accent shift such instances of *[v] would have been in complementary distribution with *[f], but after the Gmc accent shift they would have the pattern *þúrvan and hence potentially contrast with forms such as *néfa 'nephew'. Theoretically this could lead to the establishment of a new phoneme */v/.² But it is likely that these examples of *[v] would either have merged with *[β] or have been levelled out in favour of *[f]. The former is the more probable,³ for the consequences see below, §§7.59–60.

¹ The effects of palatalization and assibilation are ignored here. For their relative chronology see §7.51

² Unless one allows morphological factors to influence phonemic distribution, in which case [v] could remain as a morphologically, but not phonologically, predictable allophone of /f/.

³ Note that in Goth levelling does not always take place, thus þarf 'I need', þaúrbum 'we need', but see further Hogg (1979a).

(a) Lenition of */x/

7.45 At an early stage in the history of OE the above pattern is somewhat changed by the lenition of */x/ > [h] between voiced segments, a change which parallels the earlier Gmc lenition of */x/ > *[h] initially, for example, *xana > hana 'cock'. The process of lenition is then carried further with complete loss of [h] between voiced segments.¹ Geminate /xx/ is never subject to lenition, hence hlihhan 'laugh', hweohhol 'wheel', teohhian 'consider', Nbr æhber 'ear of corn', and similar forms. Of necessity at least one of the voiced segments must always be a vowel, and although the other may be any voiced segment, the phonotactics of proto-OE normally restrict such segments to resonants, that is, /l, r, m, n/. For examples involving other voiced consonants see §7.47. The loss of [h] is normally accompanied by compensatory lengthening of an immediately preceding short vowel, for full details see §§5.124–30. When loss of [h] occurs between vowels then the vowels will naturally come to stand in hiatus, and consequently hiatus resolution occurs, see §§5.131–3, 149. Typical examples of the lenition are as follows:² (1) between vowels: *sexan > *seoxan (breaking, see below, §7.51 for discussion) > *seohan > *sēo-an (with compensatory lengthening) > sēon 'see' (with loss of the unstressed vowel in hiatus, see §5.145); (2) between a vowel and a resonant: *flēaxm > flēam 'flight'; (3) between a resonant and a vowel: *swerxa > *sweorxa > *sweorha > sweora 'neck' (> LWS swura, see §§5.127, 184).

¹ Lenition to [h] takes place everywhere between voiced segments but subsequent loss is restricted to positions after a stressed vowel. Thus *behindan* ‘behind’ and many other similar forms show *[x] > [h] but not subsequent loss. Such forms are best taken under Gmc lenition of *x in initial position, with ‘initial position’ implying ‘initially in a stress foot’. Lenition and loss in forms such as *bēot* ‘boast’ < **bi-hāt* must be due to primary stress shifting to the first element, see Girvan (1931: §252.1A1). Loss of [h] in forms such as *nabban* ‘haven’t’ < **ni-habban* is a low stress phenomenon, see §5.153.

² The examples below are taken from WS. For different developments in the other dialects caused by hiatus resolution see §§5.131–49, and for the interaction with Angl smoothing see §7.51 and §§5.100(2), 102.

7.46 In the early Merc glossaries especially, /x/, presumably lenited to [h], is frequently still represented in the spelling by ⟨h⟩, also ⟨ch⟩.¹ Typical examples are as follows: (1) between vowels: EpGl *aehrian* ‘chaff’, cf. Nbr *æbher* ‘ear of corn’; EpGl, ErfGl 785, CorpGl 1582 *fāē(t)hit* ‘he paints’, EpGl, ErfGl 799, CorpGl 1659 *nihol(d)* ‘prone’, EpGl, ErfGl 1080–1 *ryhae* ‘blanket’, EpGl, ErfGl 1199 *sōcha* ‘enticement’, LdGl 122 *sōehere* ‘shoemaker’,² EpGl, ErfGl 654, LdGl 185 *sōyhend* ‘pander’, EpGl 1062 *swehoras* ‘brothers-in-law’, EpGl 3 *thohae* ‘clay’, EpGl, ErfGl 1066 *uulohum* ‘fringes’ dat.pl.;³ (2) between a vowel and a resonant: EpGl, ErfGl 546 *bituic(h)n* ‘between’, ErfGl 326 *thuachl*, CorpGl 641 *ðwehl* ‘washing’;⁴ (3) between a resonant and a vowel: EpGl, ErfGl 884 *furhum* ‘furrows’ dat.pl., EpGl 981 *sceollhēgi* ‘cross-eyed’.⁵ Such forms are, however, in a minority compared with cases showing loss of *h*, such as EpGl, ErfGl 797, CorpGl 1504 *fāedun* ‘they painted’ and many examples cited under hiatus resolution in Chapter 5, see also Pheifer (1974: §88).⁶ Outside these texts, and the further examples cited in n4 below, [h] is not normally represented in spellings, note however Ch8 *Uelhisçi*, except where analogy intervenes, see §7.49.

¹ For the possibility that ⟨ch⟩ could represent geminate /xx/, see §2.60n1. Such an explanation may be relevant to the cases discussed in n3, n4 below.

² *Sōehere* cannot be due to *i*-umlaut, and therefore must be either a misspelling for ⟨sceo⟩ showing palatal diphthongization of a back vowel, see §5.106n2 for other possible examples in Merc, or a confusion due to loss of [h]. But the spellings of LdGl are so unreliable that little weight can be attached to this form.

³ Perhaps also to be included here is EpGl 171 *crocha*, ErfGl 171 *chroca*, CorpGl 461 *chroa*, *croha* ‘crock’, although there may be confusion between **croha* and the alternative form *crocca*, see Pheifer (1974: 70, n171). Not to be included, however, are Nbr forms such as *eher* ‘ear of corn’, which show graphic simplification of a geminate.

⁴ In addition to the Merc forms there also exists JnGl(Li) 12.3 *ðuables* and MtGl(Li) 9.16, MkGl(Li) I 2.16 *fibles* ‘rag’ gen.sg. In order to explain such a late appearance of *h* Campbell (1959: §242) suggests that gemination may have occurred in WGmc, that is, **þwaxl* > **þwaxxl*.

⁵ Also in EpGl, ErfGl 854 *ebhatis* (=ebhatum) ‘law-suit’ dat.pl. after *[β] in a Gmc compound.

⁶ EpGl 76 *ġihōdum* ‘they went’, ErfGl 276 *ġinēhord* ‘content’, 1064 *ġeholu* ‘yellow’ all show inverted spellings with non-etymological ⟨h⟩. The first example might be held to be a diacritic indicating hiatus, thus Pheifer (1974: §72n6), and note in any case that prefixal *ġi-* is unstressed, but the other two examples are clearly errors, since ⟨h⟩ occurs between two elements of a diphthong. Both, however, may be taken as indicating that medial [h] had by then been lost.

7.47 Examples of loss of /x/ between a vowel and a voiced consonant other than a resonant are, as stated in §7.45, restricted to cases of derivation. The compounds which result can be of pre-OE origin, as in *wēobud*, later *wēofod* ‘altar’ < **wīx-bēod*,¹ or later, such as *hēadēor* ‘stag’.² Other examples include LVD † *Hēaburg*, † *Plēowald*. But in some cases the compound remains transparent and morphological juncture inhibits loss and presumably any lenition of /x/, thus *hēabburh* ‘chief town’, and many similar forms. The same, of course, occurs in compounds where the result gives /x/ between vowels, such as *hēahengel* ‘archangel’.

¹ For the substitution of ⟨f⟩ for ⟨b⟩, see §7.55.

² Both *rādēor* and *rāhdēor* exist. The difference is presumably due to the effects of morphological juncture, see immediately below and Brunner (1965: §218A2), *pace* Campbell (1959: §461n3). Note also *līcoma* ‘body’ alongside *līchoma*.

7.48 Initially [h] usually remained but throughout there are occasional examples of the failure of initial [h] to be represented in the spelling. It is not necessary to assume that initial [h] was regularly lost before sonorants, for most such examples are due to scribal error of one type or another. But loss or unhistorical use of ⟨h⟩ initially is particularly frequent in the poems of the Exeter Book, CP(H) and Li, for example, Rid 5.8 *ondweorc for hondweorc*^{1,2} ‘handiwork’, Jul 171 † *yldo* for *hyldo* ‘kindness’, Christ 885 † *healle* for *ealle* ‘all’, CP(H) 67.7, 289.8 *æfð* for *hæfð* ‘he has’ and similarly for other forms of *habban*, see Cosijn (1888a: §137), Scragg (1970: 170–1), Li *unsefontig* and forms (5×) for *hundseofontig* ‘seventy’, LkGl(Li) 1.36 *hældo* for *ældo* ‘age’. For further examples and discussion of the implications of such forms see Scragg (1970). Where initial *h* was directly followed by *l*, *r*, *n*, or *w*, see §2.72, the situation seems to have been similar, although loss of *h* was, at least in Nbr, more frequent in this position, see Lindelöf (1890: §44), Lea (1894: §101), Füchsel (1901: §44), Foley (1903: §44). For a recent discussion see Toon (1976).

¹ MCOE has forms with ⟨h⟩ in the items indicated †, following editorial emendations, see Krapp and Dobbie (1936) for the examples in the Exeter Book.

² For *ondweorc* the ms. has *weorc*.

7.49 Morphologically the most important feature of the loss of /x/ is that it leads to the development of the so-called contracted verbs, where single

post-vocalic /x/ is lost in the present tense. Thus we find verbs such as *sēon* ‘see’, cf. *metan* ‘measure’. Contracted verbs are found in strong classes I, II, V, VI, and VII and also weak classes 1 and 2, for example, *hȳn* ‘press’, *smēan* ‘think’. The disruption in structure of these verbs which is caused by loss of /x/ leads to considerable variation and analogy in many parts of the paradigm. Few of these variations are directly relevant here, but one such feature occurs in WS, also Kt, in the 2nd, 3rd sg.pr.ind. of contracted strong verbs, such as *flēon* ‘flee’, *fōn* ‘receive’, *lēon* ‘grant’, *sēon* ‘see’, *slēan* ‘strike’, *hēon* ‘thrive’, where /x/ would be expected to lenite and then disappear, thus: **siuxist* > **siexist* > **sīe-ist* > **sīest* > LWS ***sīst*, similarly LWS ***sīð*. But the usual LWS forms are of the type *sihst*, *syhst* ‘thou seeest’.¹ It seems most probable that /x/ has been analogically restored on the model of the pret.sg. *seah* ‘he saw’.² Furthermore, in words where the simple form ends finally in /x/ which is not subject to lenition, notably *hēah* ‘high’, *nēah* ‘near’, then /x/ may be analogically restored in derived forms. This is the source of comp., superl. *hēahra*, *hēahsta*, *nēahra*, *nēahsta*, and similar forms. It is clear that it is the voiceless velar fricative which is restored, rather than [h], because of subsequent developments such as palatal monophthongization > *hēhsta*, etc. (see §§5.119–23) and /xs/ > /ks/, giving *sixst*, *hēxta*, *nēxta*, etc. (see §7.6). Neither of these changes would have occurred if [h] had been restored rather than the velar fricative. In Angl similarly smoothing occurs before analogically restored /x/ in words such as LRid 4 *hēhcræft* ‘high skill’, CorpGl 1960 *hāēhnisse*, PsGl(A) 11.9, 18.7 *hēhnisse* ‘height’, PsGl(A) forms of *genehlācan* ‘approach’ (3×).³ Conversely, ⟨h⟩ may be added to words which never had /x/, such as *blēoh* ‘colour’, *frēoh* ‘free’ for *blēo*, *frēo*, on the analogy of words such as *fēoh*, gen.sg. *fēos* ‘property’, where the inflected form has loss of /x/.

¹ Kt shows variation, for example, OccGl 49.491, 1091 *forsiohð*, 530, 542 *forsioð* ‘he despises’.

² For an alternative explanation of these strong verb forms, which must nevertheless still rely on morphological criteria, see below §7.51

³ Perhaps also EpGl, ErfGl 881, CorpGl 1761 *thuerhfyrri* ‘cross-furrows’.

7.50 The evidence of the earliest texts would imply that loss of [h] took place in the late seventh century, at about the time of the composition of the common ancestor of EpGl, ErfGl, for although both texts show frequent retention of ⟨h⟩, these forms are in a minority and there is much variation and confusion, note the inverted spellings of §7.46n6 and see further Chadwick (1899: 246). Furthermore, there is no evidence of retention of *h* in the early Nbr texts, cf. CædH 8 *tīadæ* ‘he created’, which again would imply a date before the eighth century. Clearly loss of [h] is strictly contemporaneous with compensatory lengthening and must precede hiatus resolution, but this does not provide a more secure date for the present change, see §§5.130, 149.

7.51 Loss of [h] must, of course, necessarily post-date the lenition of /x/ > [h]. It is clearly the case that lenition could not have occurred before the time of breaking, since breaking occurs before /x/ in **sexan* > **seoxan* (> *sēon* ‘see’, cf. §7.45) and many other forms. It seems clear, see especially Luick (1914–40: §636A), that the change must have occurred before syncope, as shown by forms such as *tȳde* ‘he instructed’, *þȳde* ‘he pressed’ < **tūxidæ*, **þūxidæ*. If /x/ had been retained until after the time of syncope, then at that stage the forms would have been **tȳxde*, **þȳxde*, which would have then developed to ***tȳhte*, ***þȳhte* by assimilation, see §7.90. The recorded forms could only have developed normally if /x/ were lenited before syncope occurred. In the case of the 2nd, 3rd sg.pr.ind. of contracted strong verbs such as *sēon* ‘see’, etc., where /x/ remains, for example, *ġesihst*, *ġesihð*, if these forms are not to be explained analogically, see §7.49, then it must be supposed that exceptionally syncope occurred before lenition in these cases, see Luick (1914–40: §636A), Campbell (1959: §462). Perhaps more critical still for the relative chronology is the interaction of lenition of /x/ with Angl smoothing. As the discussion and forms cited in §§5.100(2), 102 indicate, smoothing normally took place before intervocalic /x/, for example, Angl *sīð* ‘he sees’ < **sixið* < **siuxið*, which indicates that lenition was the earlier of the changes. But if medial /x/ stood before a voiced consonant, then normally smoothing did not take place, for example, *hēanis* ‘highness’.¹ This supposes the following chronology: (1) lenition of /x/ before a voiced consonant; (2) Angl smoothing; (3) lenition of intervocalic /x/. But if smoothing is of */iu, iū/, then that takes place even before /x/ + voiced consonant, for example, Ps(A) *wī(ġ)bed* ‘altar’, see §5.200(2). The conclusion to be drawn is that smoothing and lenition of /x/ were almost contemporaneous, that each began to be implemented at the same time, although the full implementation of smoothing seems to be earlier than that of lenition. Since smoothing implies the pre-existence of palatalization, see §5.93, the relative chronology postulated here in §7.51 implies that lenition must also be later than palatalization. This is consistent with the fact that palatalization must, like lenition, have preceded syncope and that palatalization also preceded lenition, see further §§7.25–6. The most reasonable inference is that lenition belongs to the period shortly before the appearance of the earliest texts, and that loss of [h] almost immediately followed.

¹ For analogical forms such as *hēhnisse*, see §7.49.

(b) Lenition of /k/

7.52 In addition to the lenition of /x/, there also occurs lenition of /k/ > /x/. The change is restricted to word-final positions in weakly stressed words,

and is most commonly found in *ac* > *ah* 'but'. The change is most frequent in Nbr, where *ac* is rare, and where lenited pronominal forms are also found, such as *ih* (rarely), *meh*, *ðeh*, *ūsih*, *īowih*. Note also MtGl(Li) 19.3 *rehtlih* 'lawful' with lenition of the suffix *-līc*. In other dialects examples seem to be confined to instances of *ah*. In Merc Ru1 and Ps(A) both always have *ah*. In EWS the only instances of *ah* are at CP 305.1 and Or 69.6. In LWS examples are rare in ÆCHom and non-existent in ÆELS, but slightly more frequent in WHom. In Nbr there are a number of cases with final ⟨g⟩ rather than ⟨h⟩, such as *ūsīg*, *hulīg* 'of what sort', and MtGl(Li) 16.11 *sægdīg* 'said I'. Such spellings, and the consequent inverted spellings in, for example, *sextih* 'sixty', are considered further in §7.63.

7.53 Lenition of palatal and velar /k/ must have occurred before assibilation of *ċ*, since otherwise forms such as *iċ* could not have lenited. The regular presence of *ah* in Ps(A) would appear to confirm a dating before the middle of the ninth century. The rarity of expression in the change in both EWS and LWS need imply no more than scribal conservatism in those areas. Certainly later developments such as ME, PDE *I* and the development of the suffix *-ly*, both of which are likely to have their origins in this lenition, would suggest that the change was general and not confined to Nbr.

IV Development of fricatives (ii): voicing and devoicing

(a) Voicing

7.54 Following the loss of /x/ medially the system of fricatives in early OE was such that there was no longer any contrast in voice except finally, where /x/ and /y/ still contrasted, for example, *seah* 'he saw' v. *beag* 'ring'.¹ This lack of contrast opens the way for a further change, by which the voiceless fricatives [f, θ] and the voiceless sibilant [s] are voiced to [v, ð, z] in voiced surroundings. The change does not affect geminate consonants (/ff, θθ, xx, ss/), nor does it affect [x] since that no longer existed medially between voiced segments.² In most OE texts the change is not represented in spelling, but in early texts the voicing of [f] > [v] is quite often represented. For further details see §7.55. Normally we find spellings such as *drīfan* 'drive', *wulfas* 'wolves' for [v], *cweðan* 'say', *fæðm* 'embrace' (see §7.10) for [ð],³ *rīsan* 'rise', *bōsm* 'bosom' for [z]. Phonetically the change clearly involves the assimilation in voicing of a voiceless fricative to voiced segments when these occur immediately adjacent on both sides. But note that the change does not take place if the immediately preceding syllable is unstressed, hence *befaran* 'go round', *gēþanc* 'mind', *asendan* 'send forth' show voiceless [f, θ, s] respectively.⁴ Bearing this exception in mind, the change can be characterized approximately as follows:

$$\left[\begin{array}{c} \text{C} \\ +\text{cont} \end{array} \right] > [+voic] / [+voic] \text{ ______ } [+voic]$$

¹ Phonetically, of course, there was both a voiceless labial fricative [f] and a voiced labial fricative [β]. But phonologically the latter was an allophone of /b/, the former an allophone of /f/, and therefore the systemic contrast is between a voiceless fricative and a voiced stop, see §§2.54, 58, 7.1–3, and 7.55.

² Also unaffected by voicing is the sound produced by palatalization and assibilation of */sk/. But since this sound eventually led to geminate [ʃʃ] and developed from bisegmental */sk/, see §7.37, the failure of this sound to voice follows from the failure of geminate consonants to voice.

³ On the purely orthographic variation of ⟨þ⟩ and ⟨ð⟩ see §2.58.

⁴ This may also be the explanation of failure of voicing in a number of suffixes, most especially the abstract suffix *-iðo* and the ordinal suffix *-oða*. Thus the following forms with the abstract suffix all have a voiceless fricative: *cȳðð* ‘homeland’, *mirbð* ‘mirth’, *strengð* ‘strength’, *trēowð* ‘truth’, *ofermetto* (< **ofermēððo*) ‘pride’. Examples of ordinal numbers are quite general, such as *seofoda* ‘seventh’, *eahtoða* ‘eighth’, and so on. This explanation, due to Luick (1914–40: §639.2), is not without difficulty, however, for some words show voicing in such contexts, notably *clānsian* ‘cleanses’ (against *bletsian* ‘blesse’), *adesa* ‘adze’ (but note the alternative EModE *addice* with voiceless [s]), *sīðe* ‘scythe’ < **sizȳþi*, cf. EpGl, ErfGl 430 *sigdi*, *Temese* ‘Thames’. Since in the majority of cases the only evidence for lack of voicing comes from post-OE forms it might be better to assume that voicing took place normally in such words and that they were later subject to devoicing of final fricatives, see §§7.59ff. But this fails to explain *ofermetto*, and, probably, the etymologically difficult *bletsian*. On this general class of forms see further Bammesberger (1988: 122–5).

7.55 The voicing of [f] > [v] causes a major adjustment in the OE consonant system, for the result of the change is to create a labio-dental voiced fricative which is an allophone of /f/ alongside a bilabial voiced fricative [β] which is an allophone of /b/. In the very earliest texts, notably EpGl, ErfGl, scribes seem in part able to distinguish the two sounds, using ⟨f⟩ for [v] and ⟨b⟩ for [β]. Typical examples are: (1) for [v]: 150 *čefr* ‘beetle’, EpGl 768 *fifaldae* ‘butterfly’,¹ EpGl 459 *hofr* ‘hump’, 197, 223 *geroefa(n)* ‘reeve’, 183 *uulfes* ‘wolf’ gen.sg.; (2) for [β]: 3a *fibulae* (< Lat *fibula*, > *fifele*) ‘handle’, 115 *gaebuli* (also CorpGl 96 *geabuli*) ‘tribute’, 51 *halbae* ‘halves’, 30, 468 (also CorpGl) *scēabas* ‘sheaves’. But there is already a strong tendency to use ⟨f⟩ everywhere, as in 653 *clofae* ‘clove’, cf. CorpGl 1327 *clouae*, 837 *stefad* ‘striped’, cf. CorpGl 1571 ?*steba*, and many other forms. Substitution of ⟨b⟩ for ⟨f⟩ is much rarer and less certain, occurring only in 631 *glō(o)b* ‘glove’, where it is word-final, and EpGl 523 *raebsid* ‘reproved’, see §7.7 and nl. For less frequent examples in other texts, especially ninth-century Kt, see §2.54.²

¹ ErfGl 768 *uūaldra* is doubtless an error on the part of the German scribe, see §2.58n2.

² For the morphological alternations created by this change see §7.57.

7.56 Towards the end of the OE period in S. dialects voiceless fricatives in initial position became voiced. This change, however, is only to be regularly detected in eleventh-century and later texts. The earliest example appears to be Rec 3 *uīf* ‘five’ of *c.*925–50, note also CIGll.1156 *uilmenum* ‘film’ dat.pl. of *c.*950. More frequent examples occur in the mid eleventh-century Gen(Ker) and Ps(K) of *c.*1100. For further details see especially Dietz (1990). Other recent work, concentrating mainly on ME evidence, includes Fisiak (1984), Poussa (1985), and Kristensson (1986b). The alternative view of Bennett (1955), that the change may even have been pre-invasion, lacks any firm supporting evidence.

7.57 Medial voicing of fricatives gave rise to a great number of alternations within OE paradigms, where a voiceless fricative in an uninflected form would alternate with a voiced fricative in an inflected form, for example, *stæf* ~ *stafas* ‘staff’, *wulf* ~ *wulfas* ‘wolves’. Since such alternations are between allophones of a single phoneme, there would not be any analogical levelling or extension in OE. In later periods of the language, however, when voiceless and voiced fricatives became separate phonemes, allomorphic variation would be inherited from the OE forms, giving rise to PDE irregular formations such as *wolf* ~ *wolves*. In many cases this could permit the formation of doublets, such as *staff*, *stave*, and whilst the irregular plurals are often maintained, there are also many cases where the irregularity is eliminated, either by levelling, for example, *cliffs*, *baths* (cf. *bathe*), or by extension, for example, *glove*, *grave*. Levelling is especially extensive in Scots, probably beyond the limits described in Luick (1914–40: §653A1).¹

¹ Thus a voiceless fricative appears in all the words cited by Luick in SE Scottish dialects, such as Edinburgh *halfs*, *loafs*, *shelvs*, *elfs*.

7.58 Chronologically it must be the case that medial voicing of fricatives occurred after the lenition of **[x] > [h]*, for otherwise **[x]* would have been voiced to *[ɣ]* and then remained, as in cases of medial Gmc **[ɣ]*, for example, *dragan* ‘draw’. On the other hand, it is not possible to give a relative chronology of loss of *[h]* and voicing, the two changes being independent of one another. Voicing must, however, have occurred by the time of syncope, for otherwise forms such as **cȳbide* ‘he made known’ would have developed to **cȳðte* (with *[-θt]*) or **cȳtte* rather than *cȳdde*. The mixture of accuracy and confusion over *(f)* and *(b)* spellings in EpGl, ErfGl would suggest that by the time of their writing voicing and subsequent merger of the two fricatives had taken place, but perhaps the common ancestor from which they were working knew the voicing but not the merger. Voicing, therefore, would appear to have taken place almost immediately after the lenition of **/x/*.

(b) *Final devoicing*

7.59 As stated in §7.54, in early OE the only fricatives which contrasted in voice were /x/ and /ɣ/, but shortly afterwards a further contrast arose when [v] due to medial voicing and Gmc *[β] merged as [v], see §§7.55, 58. The result of this merger would be a phonemic contrast between /f/ < Gmc */f/ and newly created /v/. There thus existed voiceless and voiced fricative phonemes in both the labial and the velar series (but not the dental, where [ð] was merely an allophone of /θ/). However, the contrast could only exist finally, for /x/ had been lost medially due to lenition, and /f/ did not occur medially, having been voiced to /v/.¹

¹ The instances of /v/ finally are, of course, due not to medial voicing but rather to the merger of [v] and *[β]. /f/ remains finally and therefore contrasts with /v/ in that position because instances of *[β] are now members of /v/.

7.60 Then, as in the other Gmc languages, final consonants, but in OE especially final fricatives, became unvoiced, so that /v, ɣ/ > /f, x/, see §§7.64, 67 for discussion of the phonemics. In the case of the labial fricative the change might appear to be expressed orthographically, by the substitution of ⟨f⟩ for ⟨b⟩. Thus we find examples such as **healb* > *healf* ‘half’, **lēab* > *lēaf* ‘leaf’, **stæb* > *stæf* ‘staff’, **wīb* > *wīf* ‘woman’. But it is more likely that such substitution merely reflects the merger of [v] and *[β] medially after voicing, see §7.55, and thus the ability of ⟨f⟩ to represent either a voiced or a voiceless labial fricative, see Luick (1914–40: §651.2). In the case of the voiced velar fricative, however, the change is normally expressed by the use of ⟨h⟩ rather than ⟨g⟩, for example, *bēag* > *bēah* ‘ring’, *burg* > *burh* ‘city’, *plōg* > *plōh* ‘plough’. Such devoicing can affect not only fricatives occurring word-finally, but also fricatives which are final in a stressed syllable, for example, *fuþlas* ‘birds’ against *fug(o)l* ‘bird’, including cases where this is the result of compounding, such as *lahbryce* ‘breach of the law’, cf. *lagu* ‘law’. But this is a less frequent occurrence, see §§7.61–3 for examples and discussion, and there is no doubt that fricative devoicing is primarily a word-final phenomenon, which can be characterized as follows:

$$\left[\begin{array}{c} \text{C} \\ +\text{cont} \end{array} \right] > [+voice] / \text{_____} \#$$

7.61 Fricative devoicing is most extensive in WS, yet in EWS texts the change is only sporadically seen. Examples from EWS include: CP(C, H), Or (1× each) *burh* ‘city’, CP(H) (4×), CP(C) (8×), Or (3×) *genōh* ‘enough’, CP(H) 401.26 *lōh* ‘he blamed’, CP(C) 352.18 † *ofslōh* ‘he slew’, CP(H, C) (4×) *wāh* ‘wall’.¹ Devoicing is also seen syllable-finally in CP(C) † *sahlas*,

-um ‘cudgels’, where CP(H) has *saglas*, -um, and in the compounds CP(C) 218.18 *burhware* ‘citizens’, CP(C) *geföhstānum* ‘fitted stone’ dat.pl. But these few examples are greatly outnumbered by forms with ⟨g⟩, such as *burg*, etc. In LWS, on the other hand, ⟨g⟩ spellings are virtually eliminated, and there are no examples of ⟨g⟩ spellings in the above words, nor in many similar words, such as *flēah* ‘he flew’,² *sorh* ‘sorrow’, in ÆCHom, ÆLS or WHom, ⟨g⟩ spellings being confined to late mss. not conforming to the norms of the *Schriftsprache*.

¹ Note also CP(H, C) 81.19 *bōgh* ‘arm’. For further similar examples and discussion see §§7.63n1, 64.

² ÆHom 20.254 *flēag* is from the later, but ‘extremely conservative’ (Pope, 1967–8: 177) ms.P, and may be reasonably considered a genuine exception to the above statement.

7.62 There is no sign of fricative devoicing in Kt charters up to 900, for example, Ch1195.6 *Ealzburg*, Ch1197.10, Ch1482.62 -*fuglas* ‘hens’. But in OccGl 49 devoicing appears to be entirely regular:¹ 975 *burh* ‘city’, 408 *forflioh* ‘he escaped’, 1089 *genōh* ‘enough’, 365 *orsorh* ‘secure’, and, in a compound, 743, 849 *borhhond*, -*hande* ‘surety’. The situation is thus directly parallel to that in WS.

¹ The statement by Williams (1905: §99) that the unvoicing appears rarely in spelling is due to her conflation of the material for devoicing of fricatives with that for devoicing of stops; for the latter see §7.65.

7.63 The situation in Angl is quite different. In Merc the early glossaries have a few dubious examples of devoicing, thus: EpGl, ErfGl 588, CorpGl 1249 *mærh* ‘sausage’, but the word could be from either **marg* or **marh*, see Lidén (1907), Pheifer (1974: 588n), and EpGl 964 *tēac* ‘tie’ with ⟨c⟩ = /x/ or a scribal error for majuscule ⟨G⟩, see Pheifer (1974: §74n2). Similar examples are found syllable-finally in EpGl 84 *braecli* ‘garment’ dat.sg., and in the compound EpGl 735 *brōcdaettendi* ‘trembling’. Also odd is the consistent inverted spelling in EpGl, ErfGl 61, 798, 924, 984, also CorpGl (-)*faag* ‘coloured’.¹ How far these spellings indicate fricative devoicing in the dialect of these mss. remains doubtful. In Ps(A) ⟨g⟩ is always retained, for example, *ofslōg* ‘he slew’. In Ru1 devoicing is seen in *genōh* ‘enough’ (2×, no examples of *genōg*), and also at MtGl(Ru1) 10.11 *burh* ‘city’ against 22.7 *burg*. There are also a few inverted spellings, such as 24.10 *betwīg* (2×) ‘between’, 3.16 *gesæg* ‘he saw’. Amongst Nbr texts only Li shows any clear signs of devoicing with *genōh* (3×) against *genōg* (1×), other examples in that text being very rare. On the other hand, Nbr texts show a slight tendency to replace ⟨h⟩ with ⟨gh⟩, thus MtGl (Li) 2.16, JnGl(Li) 7.52 *gesægh* ‘he saw’, DurRitGlComm 2.6 *hēgh*- ‘high’, and compare the spellings cited

in §7.52. It would therefore appear that during the OE period fricative devoicing was a characteristic primarily expressed in S texts, and that orthographically it had scarcely intruded upon the Angl dialect area. But in ME the change was widespread, see Jordan (1974: §187), although he implies that this was an OE phenomenon. The ⟨gh⟩ type spellings in Nbr may be a reflection of this.

¹ Note also the compound EpGl 957, CorpGl 1380 *slāghthorn*, *slāgðorn* ‘blackthorn’, alongside EpGl, ErfGl 672 *slāchthorn*, perhaps no more than a scribal error.

7.64 In order to consider the morphophonemics of fricative devoicing, it is essential to consider the phonemic contrasts between fricatives. For the reasons discussed in §7.67 it is likely that this sound change was the final link in a chain of changes which caused reorganization of the OE fricative system, so that [x] and [ɣ] became merely allophones of one another, similarly [f] and [v] became allophones of /f/. Consequently any variation within paradigms would be between allophones of a single phoneme, and interchange of ⟨g⟩ and ⟨h⟩ would be due to the availability of two graphs to represent a single phoneme. The interchange is especially notable in Bo where forms such as *dahum* occur for *dagum* ‘day’ dat.pl.

7.65 Unlike the other WGmc languages, devoicing of final stops is only sporadically evident in OE. Occasional examples in stressed syllables include: LRid 6 *ðrēt* ‘thread’, EpGl 439 *dēatlicostan* ‘deadliest’, CorpGl 799 *sculthēta* ‘bailiff’ (< *scýld-*), OccGl 49.214 *lamp* ‘lamb’, 256, 396, 1132 *ðinc* ‘thing’, and hence 446 *ðince* dat.sg., also RuthCr 44 *ƿkyniŋc* ‘king’, see Ball (1988: 114–15). In unstressed syllables the change is rather more frequent, and *sint* ‘they are’ is very frequent in EWS, Nbr, Ru1, and Kt OccGl 49, beside LWS *sind(on)*. Li also has *-et*, *-at* in wk.pa.parts., such as *geset(t)et* ‘sat’, examples being virtually confined to post-dental position, and even then in a minority of forms.¹ Other examples are mainly sporadic and isolated, but note CP(H) (2×), Or (3×) *færelt* ‘way’ against *færeld* elsewhere, hence by extension *færelte* dat.sg. and other forms, frequent in CP and Or.²

¹ The position in Li correlates with later N developments, especially Sc *-it* for all pa.parts., such as *worrit* ‘worried’.

² It is notable that devoicing of final stops is more prevalent in EWS than in LWS, but the discrepancy is unexplained, see §7.66.

7.66 Chronologically the most helpful indicator of the date of fricative devoicing is its appearance in texts. The evidence given above would suggest that the change started in the S., and only eventually spread to Angl, perhaps after the end of the period, despite Jordan (1974: §187). Since

spellings showing devoicing are infrequent in EWS and absent in Kt before 900, the change would appear to be early tenth century, given the consistency with which the change is shown in mss. of the Ælfrician period and later. As suggested in §7.63 the evidence from early Merc texts cannot be taken as good support for an early implementation of the change further north. It is far more difficult to date the sporadic devoicing of final stops, which would appear to have occurred very early. The discrepancy noted in §7.65n2 may be due to the appearance of the change only in some dialects and its elimination from the *Schriftsprache* through a choice between competing dialects. This, however, is pure guesswork. The change seen in Li weak verbs is an exception to the above, since it appears to be the first sign there of an eventually regular shift.

(c) *Phonemic consequences*

7.67 After the processes of lenition, medial voicing, and final devoicing, it should be clear that the following situation had arisen with respect to fricatives (excluding /ʃ/, the product of assibilation of */sk/, see §§7.37–9). Amongst labials [f] occurs initially, for example, *faran* ‘go’, *fēoh* ‘money’, in gemination, whether inherited, for example, *Offa*, or through borrowing, for example, *offrian* ‘offer’, or through word-formation, for example, *offaran* ‘overtake’, and finally, whether from */f/, for example, *þearf* ‘he needs’, or from */β/, for example, *hlāf* ‘loaf’. [v] occurs only medially after a stressed vowel, for example, *hlāfas* ‘loaves’. Thus [f] and [v], being in complementary distribution, would be allophones of the same phoneme /f/. The situation for dentals is parallel. [θ] occurs initially, for example, *þyncan* ‘think’, in gemination, for example, *sceþþan* ‘injure’, and finally, for example, *þæð* ‘path’, and [ð] occurs only medially after a stressed vowel, for example, *wriðan* ‘twist’. Therefore [θ] and [ð] are allophones of the same phoneme /θ/. For velars, however, the situation apparently remains complex. [x]¹ appears medially in gemination, for example, *hlibban* ‘laugh’, and finally, for example, *burh* ‘city’. Initially [h] appears, for example, *hand* ‘hand’. The voiced velar fricative is also found initially, for example, *gān* ‘go’, as well as medially, for example, *dagas* ‘days’. Thus it would appear that [x] and [h] are allophones of the voiceless phoneme /x/, whilst [ɣ] is an allophone of the voiced fricative /g/, which appears as [g] medially in gemination, for example, *docga* ‘dog’, and after nasals, for example, *singan* ‘sing’, *sang* ‘song’.

¹ I ignore here the palatal allophone [ç], as in, for example, *cniht* ‘boy’.

7.68 The phonemic analysis of the velar consonants in §7.67 is clearly somewhat exceptional. Firstly, only there does a contrast between voiceless and voiced fricatives appear to remain. Secondly, only there is there no

voiced phonemic stop. Thirdly, medial [ɣ], apparently an allophone of /g/, is distributionally parallel to medial [v] and [ð]. It would therefore seem reasonable to suggest that phonemic reanalysis took place such that initial [ɣ] became an allophone of an otherwise defective phoneme /g/, whilst medial [ɣ] became an allophone of /x/. Such phonemic reanalysis can only be well motivated after the processes described in the preceding sections have eliminated any other putative contrasts between voiced and voiceless fricatives. It may be, furthermore, that this reanalysis leads to the phonetic change by which initial [ɣ] becomes a stop, for it would now be phonologically isolated. It is well known that by ME this change had taken place, and although the change is usually placed in late OE (so Bülbring, 1902: §487, followed by Jordan, 1974: §184; Campbell, 1959: §50.4), such dating appears haphazard, see Girvan (1931: §214). However, if the phonetic change is thus influenced by the phonemic analysis, then a dating in the late OE period, say *c.*1000, would appear to be confirmed.¹

¹ An alternative suggestion, first made by Sievers (1925) on the grounds of his *Schallanalyse*, is that the occlusion of *[ɣ] was prehistoric. This suggestion, accepted in Luick (1914–40: §633) and Brunner (1965: §211), can scarcely be correct, for it implies that somehow *[g] < *[ɣ], when palatalized, would revert to a fricative. Many modern scholars, such as Moulton (1954: 24–5), Wagner (1969: 163), Kuhn (1970: 27–8), and Lass and Anderson (1975: 134), agree that the voiced velar was a stop throughout the OE period, but their arguments too seem unconvincing. For a fuller discussion see Hogg (1979b: 92–6).

V Post-vocalic approximants

7.69 It is usually claimed that when in OE a vowel was followed by one of the approximants /j/ (whether < Gmc */j/ or by palatalization of */j/), /w/, then the approximant vocalized and usually formed a diphthong with the preceding vowel, for example, *dæġ* [dæj] > *dæġ* [dæi] ‘day’, *snāw* [sna:w] > *snāw* [sna:u] ‘snow’, see Luick (1914–40: §257), Campbell (1959: §§266, 272), Brunner (1965: §126). Such a change is apparently confirmed by spellings such as Kt *dei*, see §2.39, or EpGl 610 *mēu*, see §2.40. But, as Colman (1983b) argues, in the case of vowel + /j/ or back vowel + /w/ it is unlikely that new diphthongs */ei, ěi; æi, æi; au, āu/ etc. could so arise. Yet it remains possible, *pace* Colman, that the sequence of a front vowel + /w/ could give create diphthongs which would equate with the already existing /iu, iū; eu, ēu; æu, æu/ or their subsequent developments, see §§5.41–6.¹ Therefore it should be assumed that spellings such as *dei*, *mēu* cited above are merely orthographic variants of *deġ*, *mēw*, etc.² This is most obviously the case in those texts where ⟨u⟩ is an orthographic variant of ⟨w⟩, see §§2.40, 77.

¹ Colman's arguments are essentially theoretical, based on likely syllable phonotactics and the assumption that vocalization and diphthongization could only take place if the result was merger with an already existing diphthong. But it should also be noted that in cases where vowel +/j, w/ should produce a new diphthong, then normally the vowel continues to behave as if it were a monophthong, rather than the first element of a diphthong. The clearest example is of the type *snāw*, which gives ME *snow* by rounding of /a:/ > /ɔ:/. See Luick (1914–40: §369), Jordan (1974: §105). Possibly also relevant is the presence of second fronting in forms such as Ps(A) *deg*, see §§5.87ff. When in ME diphthongs of the type /ei, ai/ do emerge, then their subsequent behaviour is different from that of monophthongs, as in the ME merger of *dai* and *wei* (> *day, way*).

² Such variation could give rise to the equation of ⟨e⟩ and ⟨ei⟩, which might be the source of spellings such as BDS 1 *nēid-* 'necessary', see further §2.18.

7.70 It follows from the above that the only instances of so-called vocalization of /j/ are where the preceding vowel is /i(:)/, when the development would be merely: */i(:)j/ > /i:/. Common examples of the change are: *brīdel(s)* 'bridle', cf. ErfGl 127 *brīgdīls*, *frīnan* 'ask', *hlīsa* 'fame' (no examples of **hliġsa*), *īl* 'hedgehog', *rīnan* 'rain', *sīðe* 'scythe', cf. EpGl, ErfGl 430 *sīġdi*, *tīðian* 'grant'. The above examples are common to EWS and LWS, but in other dialects occurrences are infrequent. But Kt has OccGl 49.982 *brīdel*, *hlīsa* and forms (3×), 555 *wīlung* 'sorcery'; and in Merc Ps(A) has *rīneð* 'it rains' (2×), 77.27 *rīnde* 'it rained', whilst EpGl 127, CorpGl 261 show *brīdels*, and CorpGl has *iil* (2×), 1241 *sīras* 'gluttons', 834 *sīð*, cf. above.^{1,2}

¹ When the above change occurs in unstressed syllables, then /i:/ is naturally shortened to /i/. This is especially frequent in LWS and Kt, although not always expressed, thus *hefīg* is more frequent than *hefe* 'heavy', etc. Note EWS CP 267.1 *dysi* 'foolish', Or 49.23 *mēðie* 'weary' and, in Merc, CorpGl 685 *meniu* 'multitude', Ps(A) *hefie* 'heavy' (2×). See, however, for further discussion and references §7.75.

² In cases such as *īl*, *iil*, *sīras*, also LWS *Silbearwa* 'Ethiopian', there is double contraction of /ijj/ > /i:i/ > /i:/. Note also the inverted spelling ErfGl 138 *tuiġin* 'linen'.

7.71 When /j/ is after a vowel other than /i(:)/ and is immediately followed by a consonant, especially dental /θ, d, n/,¹ then it is usually vocalized in WS, but since the result of such vocalization would be an abnormal OE diphthong, /i/ is then lost and the preceding vowel is lengthened in compensation. Typical examples include:² *brēdan* 'brandish', *-bȳdiġ* 'minded', *māden* 'maiden', *strēdan* 'strew'; *onġēan* 'against', *rēn* 'rain', cf. *rīnan*, 7.70, *rēnian* 'arrange', *ðēn* 'thane' and derived forms, *wāen* 'wagon'. The change occurs equally in inflected forms, for example, *brægd* 'he brandished' to *brēdan*, *fræn* to *frīnan*, *stræd* to *strēdan*.³ Of special importance are the prets. and pa.parts. of the weak verbs *seġgan* and *leġgan*, that is, *sāde* 'he said', *lēde* 'he laid'. Generally speaking, forms with ⟨g⟩, such as *brēgdan*, predominate in EWS, but in LWS forms without ⟨g⟩ are in the overwhelming majority.⁴ In other dialects forms with loss of /j/ are sporadic. Kt has *onġēn*

(2×), 573 *gēnet* glossing L. *compulit*, -*brōdenum* (2×), see n3, -*hēdigra* (with Kt *ē* for *ȝ*), all in OccGl 49, and Ch 328 ('Saxon-Kentish', Sweet, 1885: 437) *wēn*. The only examples in Merc appear to be CorpGl 1415 *ongēn* and Ru1 *ongāen* at MtGl 27.32 beside frequent *ongwāgn*, etc. In Nbr Li has occasional instances of *māden*, *ongāen*, and -*ðwāen*, -*ðwēn* 'washed' pa.parts. of contracted *þwēan*.

¹ Before other consonants the change is rare, but the following are sporadic examples before /l/: Bede 436.3 *brāel* 'garment', LkGl(Li) 23.45, MkGl(Ru2) 15.38 *wāghrāel* 'curtain', EpGl 611 *snēl* 'snail', CollGl 1(Junius) 122.24 (printed in T. Wright and Wülcker, 1884: 106–67; reference is to page and line) † *sāesnāel* 'sea-snail', EpGl 9, CorpGl 1907 *strēl* 'bed-covering', all such forms usually alongside forms with *g*, such as *hrāegl*. Note especially that the forms corresponding to the instances of *wāghrāel* in Li and Ru2 are in both instances *wāghrāegl*. Presumably /l/ in such conditions, also /t/, syllabified to *hrāegel*, etc.

² I know of no examples of the change before /θ/ except *tīðian* 'grant', taken under §7.70.

³ The change is then analogically extended to the pa.pl. and part. of such verbs, where the velar fricative, rather than /j/ < */ǰ/, stands after the vowel. Hence forms such as *brūdon*, *brōden*; *frūnon*, *frūnen*; *strūdon*, *strōden*. Class III *frīnan* also forms a pa.sg. *frān* on the model of class I.

⁴ Notable instances include: CP 111.8 *ongēagn*, the only such example in the principal WS texts; CP 415.22 *māden*, the only such example in EWS, whilst the principal LWS texts lack *māgen*; and *sāede*, common in EWS as well as dominant in LWS.

7.72 Although /w/ should never occur finally after a vowel, see §§3.17, 4.9, it was often restored on the analogy of inflected forms, hence *snāw* 'snow' for *snā* (only in MtGl(Li) 2×) on the analogy of *snāwas*, similarly WS *cnāwst*, *cnāwð* 'thou knowest, he knows', on the analogy of *cnāwan*. So too with a great many other nouns, such as *brūw* 'porridge', *gūw* 'griffin', *hūw* 'hue', *hlāw* 'mound' *īw* 'yew', *māw* 'mew', *slūw* 'mullet', *stōw* 'place', *strēaw* 'straw', *trēow* 'tree', and verbs, such as *flēwð* 'it flows', *sāwð* 'he sows', *spēwð* 'it succeeds'. These forms could exist alongside less frequent forms without /w/, such as *gīg*, *slī(g)*.

7.73 The subsequent development of analogically restored instances of post-vocalic /w/ is complex, and the following types must be noted. Firstly, if /w/ followed a front vowel and had been restored at an early date, then the combination front vowel + /w/ could equate with the original Gmc diphthongs with second element [u], see Luick (1914–40: §258), Campbell (1959: §273) and, for an alternative view, Sievers (1965: §121.1A2). Hence forms such as: BrGl 1 1.3 *gīow*, *hēow*, *ēow*, CorpGl *mēau* (3×), ClGl 1 4112 *slēow*, note also the inverted spelling PsGl(K) 118.98 *glāwne* 'wise' acc.sg.m. for *glēawne*.¹ Similar verbal forms are ÆCHom *flēowð* (3×), *spēowð* (1×). Secondly, as the above spellings indicate, even when /w/ combines with the preceding vowel to form a diphthong <w> is usually reintroduced.

This is most probably an orthographic analogy, although there are occasional late forms, such as *ÆCHom I 404.5 strēow* for *strēaw*, which might indicate the influence of following /w/ on the second element of a diphthong, see Campbell (1959: §274).

¹ A similar type of inverted spelling may occur in EpGl 649 *scrēuua* for *scrēawa* 'shrew' and CorpGl 1768 *glēu* for *glēaw*, although both cases could be scribal errors.

7.74 The commonest morphological alternations induced by the above changes concern loss of /w/, and in such cases /w/ is often analogically restored or reintroduced orthographically. Typical examples can be seen in §7.73.

7.75 Vocalization of /j/ after /i(:)/ has an important orthographic consequence, for after that change both ⟨i⟩ and ⟨ig⟩ can represent /i:/, for example, *bridel*, *brīgdel* 'bridle'. Similarly in unstressed syllables both ⟨i⟩ and ⟨ig⟩ can represent /i/, for example, *dysi*, *dysig* 'foolish'. Hence we find inverted spellings such as *bīg* 'by' (also *bīgspel* 'parable'), *hīg* 'they', for *bī*, *hī*. This phenomenon is then extended to ⟨y⟩ and ⟨yg⟩, hence *drygge* 'dry', etc. Such inverted spellings are infrequent in EWS, see Cosijn (1888a: §§29.1, 71, 84 for examples), but much more common in many LWS texts, for example, the LWS Gospels. In *Ælfric* examples are most frequent in *ÆLet* and *ÆGram*, and rare in other texts. Such inverted spellings are naturally a characteristic of WS rather than the other dialects, given the sporadic nature of the change elsewhere.

7.76 In the present tense (but not usually the infl.inf., or pr.part.) of weak class 2 verbs, there is often variation between ⟨i⟩ and ⟨ig⟩. In WS ⟨ig⟩ normally occurs before ⟨e⟩, ⟨i⟩ before ⟨a⟩, hence *lufige* 'I love', *lufiað* 'they love', but infl.inf. *lufienne*, pr.part. *lufiende*. The situation in Kt parallels WS, whilst in Merc Ps(A) almost always has ⟨i⟩, but Ru1, like the Nbr texts, usually has ⟨ig⟩ everywhere. NNbr texts, however, often have ⟨ia⟩, as in WS. This variation should not be confused with the variation described in §7.75, and may reflect a genuine alternation between /ij/ and /i/, according to the front or back nature of the following vowel.^{1,2} Perhaps this is because medial /j/ could not occur before a back vowel, see §7.29.

¹ If ⟨iga⟩ spellings in Nbr and Ru1 are taken as analogical (either orthographically or phonologically), then the variations in all texts except Ps(A) (also later texts such as Chad, see Vleeskruyer, 1953: §77) are accounted for in this manner.

² LWS *hālige*, *hāliges*, forms of *hālig* 'holy', cf. EWS *hālgē*, *hālgēs*, if representing LWS /ij/ against EWS /j/, see Pope (1967–8: 184–5), may represent a partial restoration through analogy of the same system. If this is the case, other forms such as *hālga* would resist the analogy because of the following back vowel, see also §6.16n1.

VI Consonant clusters

7.77 In OE there were several sound changes which increased or decreased the complexity of consonant clusters either initially, medially or finally. These changes can be distinguished under four main headings: (a) gemination; (b) deletion and epenthesis; (c) assimilation; (d) metathesis. The four types are discussed in subsections (a), (b), (c), and (d) below. This classification by phonological result, however, disguises the fact that the first three types of change regularly have a common stimulus or occur under the same conditions. Such parallels will be mentioned at relevant points below.

(a) Gemination

7.78 After the operation of syncope, see §§6.13ff., single consonants could come to be followed by either /r/ or /l/. If the preceding vowel were short, then this would be a repetition of the situation in WGmc by which certain consonants were doubled after a light syllable and before a liquid, for example, **aplu-* > **applu-* > *æppel* ‘apple’, see §4.14. Thus in OE we find *betera* > *betra* > *bettra* ‘better’. Evidence of such gemination is absent from the earliest texts, hence RuthCr *ætgaðre* ‘together’, CorpGl 512 *gēgaedradon* ‘you united’,¹ but is found in CP, Ps(A), Ru *bettra* and forms, CP 457.14 *ætgaeddre*, CollGl 1(Junius) † (-)*buttorflēoge* ‘butterfly’ (2×), LWS (incl. Ælfric), Ru1 *miccle* and forms ‘much’.² This would suggest that the change began to take place by the ninth century. There are many forms which either do not show gemination, such as *betra*, or which are unscopated, such as *betera*. The former may show failure of the change because of the competing reduction of triple consonant clusters, see §7.80, or be an orthographic variant; the latter are due to the common levelling away of syncope on the analogy of uninflected forms.

¹ But compare PsCa(A) 13.7 *gēgadrades* ‘thou didst gather’, also without gemination but in a text where gemination exists elsewhere.

² Also Ps(A) 48.20, PsCa(A) 7.34 *feddra*, *feddras* ‘father’ infl., beside frequent ungeminated forms, see Campbell (1959: §453n4), although the examples may be purely scribal.

7.79 Unlike the situation in WGmc, when in OE a single consonant came to occur after a long vowel and before /r/,^{1,2} then that consonant was likely to be lengthened. In such circumstances the preceding vowel was then shortened, in order to avoid extra-heavy syllables, see §5.199. A typical example is: *nædre* > *næddre* ‘adder’, note the short vowel of the PDE form. Other similar examples are: *æddre* ‘vein’, *blæddre* ‘bladder’, *tyddre* ‘weak’. The change is common in inflected forms, such as *attres* ‘poison’ gen.sg., and then analogically extends to uninflected forms without syncope, thus

attor. Similar forms are: *foddor* ‘fodder’, *blædder* ‘ladder’, *moddor* ‘mother’, *tuddor* ‘progeny’.³ In most cases forms with geminate consonants are more common throughout the period, especially in LWS. Exceptions are *moddor* and *tuddor*, where ungeminated *mōdor*, *tūdor* dominate. A special instance of the change takes place before the comparative inflexion *-ra* and also the strong adjective inflexions *-ra*, *-re*. Examples from Ælfric include: *deopppe* ‘deep’, *goddre* ‘good’, *hattre* ‘hot’,⁴ *hwittre* ‘white’, *swettran* ‘sweeter’, *widdre* ‘wide’. Note also the EWS example CP 227.24 *geliċcran* ‘more alike’.⁵

¹ Examples before resonants other than /t/ are extremely rare, but note Nbr and, in inflected forms, WS *lyttel* ‘little’, and possibly also *māððum* ‘treasure’, mostly in poetry, see also §7.46n4. Before /j/ gemination took place if a previously long vowel were shortened in weak stress, hence *ōnettān* ‘hasten’ < **anhētjan* < **anhaitjan*, also *andettān* ‘confess’, *ōrettān* ‘fight’. Such examples, however, must be very early, certainly earlier than syncope, since palatalization does not occur. It is probably best, on the other hand, to take *feċċān* ‘fetch’ < *fetian* as an example solely of assibilation, see §7.35, note the absence of a form such as **fettian*. For alternative views see Bülbring (1902: §546), Luick (1914–40: §667), Brunner (1965: §227A3)

² Other apparent examples occur in Nbr, but it is unlikely that they indicate gemination, see §2.78n1 and references.

³ Presumably here too long vowels were shortened, cf. PDE *fodder*, etc. But it is unclear whether the shortening was phonological or analogical, see Luick (1914–40: §668n3).

⁴ And hence extended to ÆLS 14.107 *hattost* ‘hottest’.

⁵ LS 12.19 *sylra* ‘better’ must derive from **syllra* < *sellra* (cf. MtGl(Li) 10.31 < *sēra*), since the shift of /e/ > /y/ occurs only with short vowels, see §5.171n2.

(b) *Deletion and epenthesis*

7.80 Geminate consonants were liable to shortening in a variety of circumstances in OE. In stressed positions, that is, immediately following a stressed vowel, all geminate consonants were shortened finally, and medially all geminate consonants were shortened if preceded or followed by another consonant. Typical examples of final shortening include: *eal* ‘all’ < *eall*, *bed* ‘bed’, *feor* ‘far’, *hen* ‘hen’, *man* ‘man’, *nyt* ‘useful’, *sib* ‘relationship’, *swam* ‘he swam’. Medially, since WGmc gemination had either failed in similar contexts or had already been simplified, for example, **sandjan* > *sendan* ‘send’, not ***senddan*, see §4.11, geminates could only arise through either compounding, metathesis, syncope, or the addition of inflexions beginning with a consonant.¹ Typical examples in compounding are: *eorliċ* < **eorl-līċ* ‘manly’, *wildeor* ‘wild animal’, *wyrtun* ‘garden’. Examples in metathesis are: *cresse* > **cersse* > *cerse* ‘cress’, *irnan* ‘run’, *wærna* ‘wren’. Examples in syncope are of two forms: either the stem of the verb ends in /s/, in which case the 2nd sg.pr.ind. is formed as follows: *cýsist* > **cýsst* > *cýst* ‘thou chooseth’, or in weak verbs ending in a dental the pret. is similarly formed, for example, *sendede* > **sendde* > *sende* ‘he sent’. The inflexions

which cause simplification are the adjectival inflexions *-ne*, *-ra*, *-re*, where these cause simplification of a preceding, rather than following, geminate, hence from *eall* ‘all’ we find *ealne*, *ealra*, *ealre*. Simplification of geminates is regularly found with all other verbs and adjectives of the same type as these examples. In unstressed positions, where geminates are the result of compounding or suffixation or the addition of inflexions such as *-ne*, *-ra*, or *-re*, geminates are shortened even when intervocalic. Typical examples include: *æftera* ‘second’ < *æfterra*, *æmetig* ‘empty’, *bliccētung* ‘coruscation’, *gyldene* ‘golden’ masc.acc.sg., *ōðera* ‘second’, and *þises*, *þisum*, forms of *þes* ‘this’, occurring in unstressed position. The end product of these apparently various shortenings is in fact uniform, in that geminate consonants only remain if they are both intervocalic and the immediately preceding vowel is stressed.^{2,3}

¹ But geminate consonants could also arise by the processes described in §7.79, and it is possible that forms of the type *nǣdre* could show simplification rather than failure of gemination. LS 12.19 *sylra*, see §7.79n5, with a short vowel and non-geminate *ll*, would seem to confirm this possibility.

² But if geminate consonants occur intervocalically after a stressed syllable, as in *gēlēafful* ‘faithful’, degemination is much less common, hence only occasional *gēlēaful*, and similarly occasional *lateow* ‘leader’, *rūmodlice* ‘liberally’ alongside usual *latteow*, *rūmmodlice*. The relative rarity of degemination in such circumstances is wholly to be expected, see the discussion of ambisyllabicity in §2.81.

³ One apparent exception to these processes is the geminate represented by ⟨cg⟩, which always remains, for example, *ecg* ‘edge’. But there is no need to deny shortening here, since there would have been no orthographic method of indicating the change. On the other hand, even if shortened the cluster could have remained bimoric, that is, *lecg̃* rather than *lecg̃̃*.

7.81 There is considerable variation in the spelling of such shortened geminates. Thus finally, and taking as three typical examples *bed(d)* ‘bed’, *eal(l)* ‘all’, *man(n)* ‘man’, in EWS we find the following spellings:¹ *bedd* (always), *eall:eal::7:2*, *mann:man::1:2*. In ÆCHom the parallel ratios are: *bed* (always), *eall:eal::1:1*, *mann:man::3:10*. Such ratios seem to confirm that shortening was a process more often found in later than earlier texts. The variations in spelling are most probably due to orthographic influence from inflected forms, such as *mannes*, and are unlikely to be phonological, see Kurath (1956) and, for other views, Campbell (1959: §§66, 457). In other positions also both geminate and single spellings occur, but most usually the geminate spellings may be taken to indicate etymological or morphological origin.

¹ The figures for EWS are taken from Cosijn (1888a: §§138–9; 1888b: §31).

7.82 Somewhat akin to the shortening of medial geminates when preceded by another consonant is the sporadic reduction of groups of three

consonants, whether medial or final. Although a quite wide variety of forms exhibits such reduction of complex groups, it would appear that two factors influenced the loss of particular consonants: (1) a stop consonant was more likely to be lost than a fricative or sibilant, examples in §7.83; (2) if more than one stop consonant existed in the group then loss was usual of the medial, but also perhaps of the initial, and not at all of the final, examples are given in §7.84. The only other common type of loss in such groups was loss of /n/ medially (§7.85), and some miscellaneous cases are mentioned in §7.86. Generally speaking these losses are most often represented in late or very late texts, for one such example see C. Sisam and Sisam (1959: §70).¹

¹ As such, it is difficult to determine the significance of some spellings, for they might be the result of carelessness of scribes. But in many cases they may represent the pronunciation of less formal speech.

7.83 The most frequent cases of loss involving a stop are of /t/ either before or after /s/, but this was probably due only to the relative frequency of such groups, for the evidence suggests that any stop could be lost if in a group of three consonants. Typical examples of loss of a dental stop where only one stop occurs are: *betst* > *best* ‘best’, similarly other forms,¹ *blostma* > *blosma* ‘blossom’,² *brastlað* > *braslað* ‘it crackles’, **belistnian* > *belisnian* ‘castrate’,³ *ēhtst* > *ēhst* ‘thou persecutes’, *findst* > *fintst* > *finst* ‘thou findest’ (similarly, other examples of the 2sg.pr.ind. of strong verbs), *milts* > *mils* ‘mercy’, *nostle* > *nosle* ‘fillet, band’, *yntse* > *ynse* ‘ounce’; *andlang* > *anlang* ‘along’, *baldlice* > Nbr *ballice* ‘boldly’, similarly Li *moniðfallice* ‘manifoldly’, *seldlic* > *sellic* (also *syllic*, see §5.171n2) ‘wonderful’, and, in more weakly stressed syllables, sporadic examples of *-enlic* < *-endlic*, such as *unacumenlic* ‘unbearable’, *ungefērenlic* ‘inaccessible’.⁴ Examples of loss of a velar stop include: CP *gebrinð* < *gebringð* ‘it brings’,⁵ *horslice* > *horslice* ‘readily’, *lencten* > *lenten* ‘Lent’, *muscle* > *musle* ‘muscle’, *strengð* > *strenð* ‘strength’.⁶ One example of loss of a labial stop occurs in *dumbne* > *ÆHom* 18.25 *dumne* ‘dumb’ acc.sg.masc., see also §7.84.⁷

¹ Note that here final /t/ is not then lost, nor in *ēhst*, *finst*, even although in a triple cluster, see §7.84.

² But *blostm* is never reduced to ***blosm*, presumably because /m/ is here syllabic. In other respects, however, there is no requirement that the three consonants should be tautosyllabic.

³ Although **belistnian* does not occur in our texts, forms such as *belistnode* do, and there is no reason to suppose that forms with /t/ were rare, *pace* Campbell (1959: §477.2).

⁴ Even in non-primary-stressed syllables the change is sporadic, hence more frequent *sōðfæstnes* ‘truth’, and similar forms, alongside *sōðfæsnes*, etc.

⁵ Usually corrected spellings appear in the mss., that is, *gebringð*.

⁶ In OccGl 49 842 *strenðe* occurs alongside 795 *strengð*, together with a number of other examples with omitted ⟨g⟩, thus 183 *gionne* (for *giongne*) ‘young’ acc.sg.masc., 697 *hinrað* (for *hingrað*) ‘is hungry’, 286 *gemende* (for *gemengde*) ‘it has mixed’. But note that the same text also has loss of final ⟨g⟩ in examples such as 642 *stran* (for *strang*) ‘strong’, and all such forms may be due to scribal carelessness, see Williams (1905: §§90.5, 106).

⁷ Note also *ācumba* > *ācuma* ‘oakum’, with possible loss of /b/ in a weakly stressed position, but cf. 7.91n5.

7.84 Occasional examples of a stop being lost where more than one stop occurs in a group of three consonants are as follows, where the medial stop is lost: **cembde* > Med 1.1.121 (2×) *cemde* ‘she combed’, *eldcung* > *elcung* ‘delay’, *selcūð* > *selcūð* ‘strange’. Possible examples involving the initial stop in a group of three are always of the type *ēhtst* > *ēbst*, discussed under §7.83.

7.85 The most frequent examples of loss of /n/ when medial in a group of three occur with immediately preceding /m/. Thus are found, even in early texts, regular *nemst*, *nemð*, *nemde*, forms of *nemnan* ‘name’, beside only Bede *nemnde* (3×), Chron(A) 891.10, HomS 1.97 *genemnde*,¹ EWS *emnlīce* > LWS *emlīce* (also at Or 60.3) ‘equally’, AldV *fāmhā(d)līc* - (2×) ‘virginal’ alongside more frequent *fāmhād*-.² Examples, usually late, after consonants other than /m/ include: *elnboga* > *elboga* ‘elbow’, *ondrysnlic* > *ondryslīc* ‘terrible’, *Sæterndæg* > *Sæterdæg* ‘Saturday’, *wāpman* > *wāpman* ‘man’.³

¹ Also † *aremdest* (in Logeman, 1889: 505, 1.4) ‘thou didst endure’ < **aremnan* < *aræfnan*.

² In this and similar forms /n/ may have often been retained from the simple form, that is, *fāmne* ‘woman’.

³ It is debatable whether AntGl 4.990 *agneras* ‘corners of the eye’, against C1G1 1.3241 *ongneras*, is an example of loss of /n/ ([ŋ]) initially or merely an error.

7.86 Various other examples of consonant loss in groups of three are perhaps too sporadic and scattered to be accorded much significance.¹ Some examples include: *ferhð* > *ferð* ‘spirit’,² *myrhð* > *myrð* ‘mirth’, Angl *margin* > *marne* ‘morning’, cf. §5.34, Ch 1428.8 *weorscipe* ‘worship’. Further examples can be found in Campbell (1959: 477.6), Klaeber (1903: 243–5), von Feilitzen (1937: 95).³

¹ The examples of loss of /w/ in groups of four as cited by Luick (1914–40: §677.10), namely Christ 1436 † *andlata* ‘face’ and late † *ærendreca* ‘messenger’, are unlikely. The former appears to be a scribal error; the latter, which I have not found, would most probably be due to confusion between *ærendraca* and *ærendwreca*.

² Also, by metathesis of *fyrhð*, see §7.95, And 174, Gen 1142 *frið*.

³ In late Kt and LWS loss of /r/ occurs in *sprecan* ‘speak’ and forms. In OccGl 49 forms without /r/ occur 4×, with /r/ 1×. In LWS *r*-less forms are uncommon in Ælfric

mss., but quite frequent in WHom and the LWS Gospels. The loss is seen in a few other words, notably LWS *prætig* > *pætig* 'sly' (also Nbr), and is quite frequent before /n/ in unstressed syllables, hence *isern* > *isen* 'iron', and the compounds of *-ærn* 'house', such as *beren* 'barn', *cwearten* 'prison'. Nbr texts frequently spell the unstressed syllable *-en* as *-ern*, for example, *efern* for *efen* 'evening', and similarly *fæstern* 'fast', *wōestern* 'desert', which may be examples of inverted spelling. Such loss in unstressed syllables should be distinguished from the loss prevocally, and it is doubtful whether any of these instances are properly to be linked with the other examples of consonant loss discussed above. For further examples of /r/ loss see Campbell (1959: §475).

7.87 Much less frequent than the simplification of consonant clusters by deletion is the reverse process of epenthesis. The most regular examples of epenthesis occur medially¹ between a nasal or, less commonly still, the strident /s/ and a sonorant consonant, that is, a liquid or a nasal. In such cases the epenthesized consonant agrees with the preceding consonant in place of articulation and the following sonorant in voice. Instances of epenthesis after a nasal are: *bræmbel* 'bramble', CP 187.6 *cumbel* 'wound',² EpGl, ErfGl 185 *hymblicæ* 'hemlock', *symble* 'always' (WS, Nbr); EpGl, ErfGl 729 *cendlic* 'convenient', *endleofan* 'eleven' (WS), ErfGl 729 *morgendlic* 'morning', ÆGram 43.11 *gandra* 'gander' (other texts have *ganra*).³ Instances of epenthesis after /s/ are: *hwistle* 'whistle' and derived forms (only with epenthesis), *mæstling* 'brass', but Nbr *mæslen*, *mistlice* 'variously' (esp. WHom), Mart 5.1375 *ondrystlicum* 'terrible', see §7.85, Bede 300.2 *towestnis* 'discord'.⁴

¹ There are occasional examples of initial ⟨scl, scn, scm⟩ for ⟨sl, sn, sm⟩. Examples of ⟨scl⟩ appear to be restricted to CorpGl 433 *sclát* 'tore', Ch (various) *sclēd* 'slade, greensward', OccGl 49.694 *sclēacnes* 'laziness', Alex 399 *scuncon* 'they crawled', CorpGl 693 *asclæcadun*, CollGl 49.696 *asclacade* 'loosened', and a few other late forms including ⟨stl⟩ spellings in PsGl(K), see K. Sisam (1913: 305), C. Sisam and Sisam (1959: §68). For ⟨scm⟩ there is only PsGl(A) *scmēgende* 'considering', and for ⟨scn⟩ CP 155.17 *scniċendan* 'crawling'. Neither the intention nor the cause of these spellings is clear, see K. Sisam (1913: 306–7), Brunner (1965: §210.1), Luick (1914–40: §650). If they represent epenthesis of /k/, this is more probable in the slightly more frequent examples before /l/. Further, the form *scmēgende* is almost certainly an error, see K. Sisam (1913: 305). No one, apparently, has investigated the possibility that spellings such as these might indicate a shift of /s/ > /ʃ/. But this might be more plausible as an explanation than consonant epenthesis.

² But *cumbol* 'banner', for example, infl. *cumbles*, is general in Gmc and hence less certain.

³ An example of epenthesis between a nasal and an obstruent is LWS (3×) *æmptig* 'empty'.

⁴ Lch II, Alex have *balzam* 'balsam', with epenthesis between /l/ and /s/.

(c) *Assimilation*

7.88 The most general type of assimilation in OE was voicing assimilation, whereby a voiced consonant became voiceless when immediately followed

by a voiceless consonant. This change can be seen as the converse of the voicing of fricatives between voiced sounds discussed in §§7.54–8, although here the change also affects stops, hence not only *geoguð* > OccGl 49.1097 *giohð*- ‘youth’, with devoicing of /y/ > /x/ before /θ/, but also *milds* > *milts* ‘mercy’, with devoicing of /d/ > /t/ before /s/. In cases involving the fricatives /f, θ, s/, as with voicing, the change cannot be detected orthographically and, furthermore, the history of a particular sound may involve both voicing and, after the operation of syncope, devoicing. For example, WS *drīfst* derives from **drīfest* > **drīfest* (with voicing to [v]) > **drīfst* (syncope) > *drīfst* (voicing assimilation to [f] before /s/). The examples involving orthographic change, however, show that the sound change was phonologically real and it may be approximately stated as follows:

$$C > [-\text{voice}] / \text{_____} \left[\begin{array}{c} C \\ -\text{voice} \end{array} \right]$$

7.89 As stated in §7.88, the major types of example of voicing assimilation which were orthographically represented involved either stops or the fricative /y/. In the case of stops examples are restricted to /d/ and, after nasals, [g], due to the distribution of stops and fricatives outlined in §§7.2–3. Examples involving /d/ include forms of:¹ *bletsian* ‘bless’, *bletsung* ‘blessing’, *gītsung* ‘greed’, and *milts* and derivatives ‘mercy’, also CorpGl 1734 *etsīth* ‘a looking again’, and the 2,3sg.pr.ind. of verbs such as *lædan* ‘lead’, *rædan* ‘advise’, hence *læst*, *ræst*, **lætð*, **rætð*.² Parallel examples for [g] are relatively infrequent, but include occasional *ancsum* ‘troublesome’ beside more frequent *angsum* and *strencð* ‘strength’ beside *strengð*. The change only rarely affects the 2,3sg.pr.ind. of verbs such as *bringan* ‘bring’, so that we find rare *gebrincst*, *brincð* beside usual *bringst*, *bringð*.³ Instances of the assimilation of [y] > [x] include⁴ OccGl 49.1097 *giohð*-, see §7.88, and cases of the 2,3sg.pr.ind. of verbs such as *lēogan* ‘lie’, *stīgan* ‘climb’, thus *lihst*, *lihð*, *stihð* alongside *ligst*, etc.⁵ In such cases the earlier change of /xsl/ > /ksl/, see §7.6, does not usually re-occur, and even forms such as *hēxta* ‘highest’, cited in §7.6, are usually less common than *hēhsta*, etc.

¹ These examples usually co-exist alongside less frequent examples with ⟨d⟩, such as *bledsian*. Generally speaking, patterned variation is difficult to detect, but note that Ps(A), also Ps(C) regularly show no signs of voicing assimilation and, for example, CP has only *bledsung(e)* ‘blessing’, although assimilation is found in other forms in the same text. A further example of assimilation may be CorpGl 799 *sculthēta* ‘bailiff’.

² For subsequent changes giving *læst* > *læst*, **lætð* > *lætt*, etc., see §§7.83, 91.

³ For loss of the velar stop in clusters, for example, *brind*, see §7.83.

⁴ In these cases [y] may be either original or from [j] which either reverted to [y] after syncope or was analogically replaced by [y], see §7.29. Although it is often claimed, for example, in Luick (1914–40: §649A2), that [j] cannot be subject to such

assimilation, hence *eġsa* ‘terror’, other forms may indicate a shift, for example, *ē(a)hsȳnes* ‘with one’s eyes’. Perhaps one should take account of the orthographic problems in representing [ç].

⁵ Additional examples appear to include the type represented by *myrhð* ‘mirth’, where it is unnecessary to suppose that ⟨h⟩ is for ⟨g⟩, *pace* Campbell (1959: §480.3n1). If [χ] can be devoiced, there seems no reason why its palatal counterpart [j] cannot also be devoiced. A further type is represented by common LWS *nē(a)h(h)ebūr* ‘neighbour’ < *nēahgebūr*.

7.90 Voicing assimilation also occurs rightwards when a voiceless consonant is followed by /d/. This phenomenon is most widespread in the preterite of class 1 weak verbs, where medial *i/e* was syncopated after a heavy syllable. In such cases the preceding consonant may be either a voiceless stop or a voiceless fricative, where the latter had remained voiceless either in gemination or due to a preceding voiceless stop, and the consequence of the change is that /d/ devoices to /t/. Examples are very numerous and regular, the various types being represented by, for example: **slēpde* > *slēpte* ‘he slept’, *mētte* ‘he met’, *sīcte* ‘he sucked’; *pyfte* ‘he puffed’, *cyste* ‘he kissed’, *līxte* ‘he shone’. Spellings with ⟨d⟩ are rare and most often found in Li, for example, LkGl 9.39 *ġgrippde* ‘he gripped’, LkGl 8.23 *slēpde*, MtGl 27.52 *slēpdon* ‘he, they slept’, and, especially, frequent *ġenēolēcde* ‘he approached’ and related forms beside occasional *ġenēolēcte*. Outside Li examples are rare, but note Mt(WSCp) 27.44 *hyspdun* ‘they mocked’, CorpGl 1082 *ræfsde* ‘he seized’.¹

¹ To these may perhaps be added CP(H) 257.24 *wyrmsde* ‘it suppurated’, but note the alternative CP(C) form † *wyrsmde*.

7.91 Full assimilation of consonants in clusters also occurs, although it is generally sporadic and often prevented by inflectional juncture. The direction of assimilation is usually leftwards, and the assimilation is most often to a resonant, that is, /m, n, l, r/, for assimilation to obstruents see §7.92. There appears to be some restriction on the assimilating consonant. For assimilation to /l, r/ the assimilating consonant must also be dental or alveolar,¹ whilst for assimilation to a nasal any consonant may be affected but labial consonants retain their place of articulation even if the nasal is /n/.

- (1) Assimilation to /n/ is found with /f/ and, occasionally, /p, s, x/. In the case of the labials the shift is partial and to /m/. Examples of /fn/ > /mn/, all beside forms without the shift, are *em̄n* ‘even’, *hrem̄n* ‘raven’,² *stem̄n* ‘voice’,³ *stem̄n* ‘period’, *stem̄n* ‘stem’, and *nem̄ne* ‘unless’.⁴ All these forms are WS except that *stem̄n* ‘voice’ is also found in Ru1 and *nem̄ne* is principally Angl. For a full discussion see Flasdieck (1950: 142). /pn/ > /mn/ is seen in occasional LWS *wæmm̄* ‘weapon’. Li *ðionne*

‘this’ acc.sg.masc. (3×) alongside usual *ðiosne* is the principal example of assimilation of /sn/. For /xn/ > /nn/, if this is not to be taken under n1, there is WS *hēanne* ‘high’ acc.sg.masc. and LWS, INbr *hēannes* ‘highness’, see also §5.100. Rightwards full assimilation to /n/ occurs in poetical *benne*, *bennum* ‘fettors’ (4×) < *bend*. Otherwise in such contexts, there is rare place assimilation with a following obstruent, as in *elmboga* ‘elbow’, Beo 1269 *gimfæste* ‘huge’, alongside *elnboga*, *ginfæste*, and Beo 3033 *hlimbed* ‘bed of rest’.⁵

- (2) Assimilation to following /l/ occurs with /d, n, s/, but is always infrequent. Examples of each are: AldV 13.1 535 *fæmnhālicum* ‘virginal’ dat.sg.neut. with ⟨l⟩ for ⟨ll⟩, see §7.80,⁶ INbr *ællef* ‘eleven’ and forms, forms of *þylliċ*, INbr *þulliċ* ‘such’.
- (3) Examples involving /r/ include /n/ > /r/ in Ch 1438(1) † *Cyrredi* personal name and the further proper names *Æþer(r)ed*, *Eðeric*, both with /l/ > /r/. In contrast INbr especially has *sella* ‘better’ < *sōēlra*, with /lr/ > /ll/. A possible example of rightwards assimilation is *lāreow* ‘teacher’, but this is more probably due to simplification of *lār* + *þēow* in compounding.

¹ The frequency of EWS *hierra* (to the exclusion of ***hiebra*), LWS *hýrra* ‘higher’ would suggest that this cannot be an example of the sporadically attested type of assimilation under discussion. This seems to be confirmed by the phonology. It is more probable that we are dealing with a special instance of loss of [h] between a vowel and a resonant, with compensatory lengthening of the resonant. Note that LWS *hēabra* is presumably a spelling based on the analogical reformation of the comparative, without any necessary phonological implication. The same explanation can also hold for *nēarra* ‘nearer’. MtGl(Ru) 21.31 *nēarra*, DurRitGl 1 120.4 *hērra*, both with analogical restoration of /x/, may also be so explained, although the latter could merely show INbr illogical doubling of consonants.

² Quite frequent LWS *brem(m)* and forms probably show full assimilation of /fn/ > /mm/, but with the nasal becoming labial.

³ LS 34 1.162 *stemme* may, if not a scribal error, show the same assimilation as in *bremm*. Luick’s (1914–40: §682) suggestion that this is a word- and syllable-final phenomenon is not convincing.

⁴ LkGl(Ru2) 1.27 *fæfne* ‘woman’ acc.sg. is an unusual inverted spelling for *fæmne*. Note that the form is Nbr rather than Merc.

⁵ PrudGl 1 246 *ācuma* ‘oakum’ and Or 173.10 *oferclom* ‘he climbed upon’ are both uncertain examples of /mb/ > /mm/ with simplification of the resultant geminate, see §7.83n7 for *ācuma*.

⁶ In view of AldV 13.1 1717 *fæmnhādlicere*, *fæmnhālicum* may simply be an error.

7.92 Full assimilation to obstruents occurs in three distinct environments. The first of these, which is frequent and regular, involves dental stop + fricative, which develops as /tt/. The stop may be originally either voiceless or voiced, in the last case already becoming voiceless by §7.89. The change is particularly common in the 3sg.pr.ind. of verbs, such as *lætt* ‘he leads’

< *læteþ*, *rītt* ‘he rides’ < *rīth* < *rīdeþ*, *mētt* ‘he meets’ < *mēteþ*. Any exceptions are extremely rare and of no significance. Where the result is consonant + geminate, for example, *bindeþ* > ***bintt*, degemination occurs, for example, *bint* ‘he binds’, see §7.80. Examples involving nouns include *lātteow* ‘leader’, *ofermētto* ‘pride’, alongside *lātþeow*, *lādteow* (with assimilation of the stop feature alone), *ofermēdo*, and *ġesynto* ‘health’. Cliticization leads to assimilation in frequent *þætte* ‘that’ < *þæt þe* and PsGl(B) *mitty* ‘when’ (2×) < *mid þy*.¹ Secondly, in late texts there is the reverse assimilation of /θd/ > /dd/. Hence we find frequent *cýdde* ‘he declared’ in Ælfrician and other texts of the same period, usually far more often than *cýþde*, the usual earlier form.² The third type involves /s/, and may be subdivided in two. Firstly, /θs/ > /ss/, which is especially common in the 2sg.pr.ind. of verbs, such as *cwist* ‘thou sayest’ < *cwiþst* < *cwiðest*, similarly *cýst* ‘thou makest known’. These exist alongside forms such as *cwiðst*, *cýðst*, probable analogical replacements. Common examples elsewhere include *bliss* ‘bliss’, *liss* ‘kindness’. The second sub-type is the assimilation of /sr/ > /ss/. This is found in the irregular comparatives *lāssa* ‘less’ < **lāssra*, *wyrsa* ‘worse’ < **wyrsra*, the gen. and dat.sg.fem. and gen.pl. of *þes* ‘this’, that is, *þisse*, *þissa*, although in Nbr reformation takes place, note especially gen.pl. *ðisra* as well as dat.sg.fem. *ðis(s)er*, and, against outside Nbr, in inflected forms of *ūser* ‘our’, hence *ūsses*, *ūssa*, *ūssum*. The assimilation of /sr/ > /ss/ is generally held to be early, for otherwise [sr] would have shifted to [zr] by voicing assimilation, and, it is held, [zr] could not develop to [ss], see Campbell (1959: §484n1). Also in favour of such a view is the regularity of assimilated forms. On the other hand, if [zr] assimilated to [zz], this would be a voiced fricative geminate, which is abnormal for OE, and the geminate may have shifted to the usual /ss/ by substitution. Even if [zz] remained, there was no obvious orthographic representation other than ⟨ss⟩. Hence the facts must remain uncertain.

¹ Note also Chron(A) 755.34 *þæt tætt*, presumably also a case of assimilation after cliticization, in an example of indirect speech.

² It is unclear to me what Campbell intends when he states (1959: §482) that ‘the resistance [to the change of /θd/ > /dd/] was phonological.’

(d) *Metathesis*

7.93 Two types of metathesis commonly occurred in OE. The first type, which involves reversal of /t/ + short vowel sequences, is termed *r*-metathesis; the second type involves the inversion of consonant + consonant sequences. The dominant type here involves /s/ and may therefore be termed *s*-metathesis, see however §7.13 for metathesis of /l/ > /ld/. Of these types *r*-metathesis is the more frequent and has more phonological consequences, and it is therefore discussed first below.

7.94 R-metathesis normally occurs when /r/ is followed by a short vowel and a dental or alveolar consonant, usually /n/ or /s/ (including /s/ in */sk/ > later /ʃ/), less often, and in Nbr only, /d/. Typical examples of the change are: *ærn* ‘house’, *hærn* ‘wave’, *bærst* ‘he burst’, *bærstlian* ‘crackle’, *dærstan* ‘dregs’, *gærs* ‘grass’, *wærna* ‘wren’, *ærnan* ‘run’ *bærnan* ‘burn’ (both weak class 1), *berstan* ‘burst’, *þerscan* ‘thresh’ (both strong class III), *cerse* ‘cress’, *fersc* ‘fresh’, *cyrps* ‘curly’, *forsc* ‘frog’, *forst* ‘frost’, *hors* ‘horse’. All the above examples involving a front vowel show no evidence of breaking, but when the relevant vowel is /i/, then half-breaking occurs, see §5.26. Consequently we find forms such as EWS *biernan*, *birnan*, *byrnan*, LWS *byrnan*, Merc *beornan*, Nbr *biorman* ‘burn’ and similarly for *yrnan* ‘run’, *fyrst* ‘period’. It may be that *i*-umlauted forms such as *wærna*, *ærnan*, *bærnan* quoted above show a similar lowering effect of /r/, for an alternative explanation see §5.78n5. It is noticeable that when the following consonant is /d/ there is no further sign of metathesis, hence Nbr *birdas* ‘birds’, *ðird(d)a* ‘third’.¹ The same metatheses are found in secondary-stressed and unstressed syllables such as AntGl, CIGl 1 *cnēw-hand-wyrst* ‘knee, wrist’, Mart 5.138 *ondyrstlecum* ‘terrible’ dat.pl., Nbr, Ru1 *tinterg* ‘torment’.²

¹ Exceptionally *r*-metathesis occurs with an intervening long vowel in *gescýrded* ‘clothed’, found at And 1311, El 141, and in various LWS texts.

² It is possible that in *tinterg* the fricative reverts to a velar, as against usual *tintreg*.

7.95 Sharply to be distinguished from the *r*-metatheses discussed above are cases where post-vocalic /r/ is metathesized to stand before a short vowel. These cases are mainly restricted to INbr and occur where /r/ is originally followed by /xt/. Typical examples from INbr are: *breht* ‘bright’, *froht* ‘afraid’, *frohtiga* ‘fear’, *fryhto* ‘fright’, *wrihta* ‘maker’, *wrohte* ‘worked’. Outside INbr we find only Ru1 forms of *frohtigan* ‘fear’ and occasional EWS, LWS *wrohte* ‘worked’, GenA, B 106 *stīðfrihþ* ‘stern of mind’, together with, in secondary stress, the name-element *-byrht*, *-berht*. Very occasional forms such as MtGl(Li) 28.4 *fryhto*, MkGl(Li) 5.33 *forohtade*, JnGl(Li) (2×) *geberehtnad* indicate that the process here was initially one by which the heavy consonant cluster /rxt/ was broken up, and then stress transferred to the epenthetic vowel, see Brunner (1965: §166),¹ and *pace* Campbell (1959: §459n2).^{2,3}

¹ The same position is held by Lass (1978: 258), but his further conclusions are untenable.

² Not to be taken here are the occasional examples LchI (3×) *scruf* ‘scurf’, ErfGl 307, CorpGl 557 *ðrop* ‘farm’, which are presumably inverted spellings from the metathesis discussed in §7.94. The form † *wrusm* is not OE, but from *Ancrene Riwe*, see Bosworth and Toller (1898: worms).

³ The restrictions on this metathesis and its phonological explanation both exclude as irrelevant Inscr 8.2.3 *berōþor* ‘brother’, see §6.34n1.

7.96 In the instances of *s*-metathesis the other consonant involved is usually a voiceless stop. There is no clear preference for one order over another, and therefore there are metatheses of both /s/ + stop and of stop + /s/. The change is, however, largely restricted to LWS.¹ Examples of /sp/ > /ps/ are: *æpse* ‘aspen’, *cops* ‘fetter’, *hæpse* ‘hasp’, *wlipsis* ‘lisping’, all except *hæpse* also with ⟨sp⟩; note also *cyrps* ‘curly’, cf. §7.94. The reverse metathesis occurs in *wæsp* alongside *wæps* ‘wasp’. With /t/ only metathesis of /ts/ > /st/ is found: MtGl(Li) 3.1 *bæstere* ‘baptist’ alongside *bæzere*, CorpGl 296 *thrūstfell* ‘leprosy’, cf. Goth *þrūtsfill*. With /k/ only metathesis of /sk/ > /ks/ is found,² and such cases are naturally restricted to positions where /sk/ is unpalatalized and unassibilated, that is, before back vowels, see §7.14(4). There, however, LWS texts³ show a great many metathesized forms with ⟨x⟩ representing /ks/, such as *axan* ‘ashes’, *axian* ‘ask’, *dixas* ‘dishes’, forms of *dox* ‘dark-coloured’, *fixas* ‘fishes’, *frox* ‘frog’, *geoxa* ‘sobbing’, *hnexian* ‘soften’, *huxlice* ‘insultingly’, *max* ‘nets’, *muxle* ‘muscle’ (< Lat *musculus*), *rixum* ‘rushes’ dat.pl., *toxa* ‘toad, frog’, *tux* ‘tusk’, *þerxan* ‘thresh’, *waxan* ‘wash’.

¹ One form which occurs widely, however, is *betwix* ‘between’, which Luick (1914–40: §693.2a) suggests may be a low stress form. The form occurs as early as 888 in ChHead 1204.1.1 and at CP 423.4, also CP *betwēox* (5×).

² ErfGl 321 *aesc* for *æx* ‘axe’ is probably an error, as is the reverse example 302 *merix* for *mersc* ‘marsh’. However, LawIne 43.1 *æsc* ‘axe’ may be a sole genuine example of /ks/ > /sk/.

³ Outside WS metathesis of /sk/ > /ks/ is found frequently in MtGl(Ru) 19.17 *geaxas* ‘thou askest’ and other inflected forms, although this may be due to WS influence. See also n1 above.

7.97 There are number of cases of *s*-metathesis other than those outlined in §7.96, thus: ÆCHom I, 3 56.33 *gyrstandæiġ* ‘yesterday’, Bede (4×) *clæsnunge* ‘cleansing’ dat.sg.,¹ CP 273.21, Lch I (4×), EpGl 777 *worsm* ‘pus’. It is noticeable that the last two cases are relatively early (although *clæsnunge* reoccurs in late texts), and they may therefore not be entirely trustworthy. The example of *gyrstandæiġ* probably shows metathesis of /st/ with /t/, /st/ being treated as a unit, see §2.83(1).

¹ Note also the confused spelling Bede 5 442.12 *clænsnunge*, the same error occurring occasionally in minor texts.

VII Loss of final nasals

7.98 A change specific to Nbr, and which is already found in the earliest Nbr texts, is the loss of word-final /n/. Amongst early texts examples are: CædH 9 *foldu* ‘earth’ acc.sg., 1 *herġa* ‘praise’ (L only), LRid 11 *eorðu*

‘earth’ acc.sg., 8 *ōuana* ‘from anywhere’, RuthCr 48 *bismærædu* ‘they reviled’, 57 *kwōmu* ‘they came’, 40 *galǵu* ‘gallows-tree’ acc.sg., 40 *ǵistiǵa* ‘climb’, 45 *hælda* ‘hold’. But in these same texts there are also forms without loss of /n/, such as CædH(M) 1 *herǵan*, LRid *uullan* ‘wool’ gen.sg., RuthCr 63 *aleǵdun* ‘they laid down’. The co-existence of such forms in the same morphosyntactic categories, cf. §7.99, may imply that at that stage the /n/ had not yet been fully lost or had nasalized the preceding unstressed vowel, in which latter case ⟨n⟩ would represent a nasalized vowel rather than /n/.

7.99 In later Nbr texts, the loss of /n/ is fully expressed, but that loss appears to have been restricted to well-defined morphosyntactic categories. Thus we find loss of /n/ in weak nouns, such as *cofa* ‘cave’ acc.sg., in infinitives, such as *arīsa* ‘arise’, in subj.pl., such as *ǵeworðe* ‘they may become’, in adverbs ending in *-an*, such as *biǵeonda* ‘beyond’, and in numerals, such as *twōēǵe* ‘two’. But final /n/ is not lost in the pa.parts. of strong verbs, such as *arisen* ‘arisen’, nor in nouns with *-en*, such as *drihten*. Nor is final /n/ usually lost in the pa.ind.pl. of verbs, although it is lost in the pa.subj. of verbs, such as *onfunde* ‘they may have discovered’. Such distribution is only compatible with an explanation that relies on morphological criteria. On the other hand retention of /n/ in monosyllabic weak forms such as *in*, *on* may be purely phonological.

7.100 Outside Nbr only the Merc Ru1 has frequent loss of final /n/, where it is particularly frequent in weak nouns. In the other categories discussed in §7.99 the loss is relatively infrequent, for example, *twōēǵe* 2× against *twōēǵen* 28×, see E. M. Brown (1892: §12). The loss of /n/ in forms such as *binde wē* for *binden wē*, which can be found generally in OE, are best associated with the developments discussed in §7.85, and are not relevant here.

VIII Late Old English changes

7.101 There are two possible phonemic shifts which begin to be seen in the late OE period. These are of /m/ > /n/ and of /θ/ > /s/. Both these changes are heavily influenced by morphological factors, and, see §7.102, at least the first of these changes may be wholly non-phonological.

7.102 The shift of /m/ > /n/ is already to be seen in EWS dat.pl., where there are a considerable number of forms in *-an*, especially in the weak declension of adjectives, see Cosijn (1888b: §51). In late texts the change is rather more frequent, for example, *daǵon* for *daǵum*, but in uninflected

forms such as adverbs the change is rare, and this suggests that we have to do with the analogical spread of the weak inflexion *-an* rather than any phonological shift.

7.103 In Nbr only, final /θ/ in 3sg.,pl.pr.ind. is often spelled as ⟨s⟩, indicating a shift to /s/. This shift is indicated by a total confusion of spelling so that *-eð*, *-að* and *-es*, *-as* may be found alongside one another, for example, MtGl(Li) 7.7 *cnysað vel cnyllas* alternatively glossing *pulsate*. Furthermore, the 2sg.pr.ind. may be spelled with ⟨ð⟩. The morphological restriction on these forms indicates that the shift could take place only under favourable morphological conditions, but its spread to the plural shows that the stimulus cannot solely have been an analogy with Scandinavian, for another view see Luick (1914–40: §698).

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Word index

The alphabetical order follows normal usage except in the following particulars:

- (1) ⟨æ⟩ is placed after ⟨a⟩ and ⟨þ⟩ is placed after ⟨t⟩. Variant graphs, for example ⟨ae⟩ for ⟨æ⟩, ⟨ð, th⟩ for ⟨þ⟩, ⟨u, uu⟩ for ⟨w⟩ are not distinguished in order.
- (2) The prefix ⟨ge-, gi⟩ is ignored in alphabetization, but all other prefixes are appropriately ordered.
- (3) Where variant elements in head-forms are indicated by rounded brackets in the head-form itself, the full spelling determines the alphabetical order, except in the case of such alternative spellings due to palatal diphthongization of back vowels, for example ⟨s̄c(e)acan⟩ where the order is determined by the variant ⟨s̄cacan⟩.

Words are normally indexed under a head-word according to Late West Saxon norms, with the exception that some individual forms are indexed separately where that is the only form discussed. The head-word is cited in its nominative singular (masculine) form for nouns and adjectives and in its infinitive form for verbs. If no such form is attested in OE, then this is indicated by an asterisk. In the case of first and second person personal pronouns the singular and plural (dual) forms are separately indexed.

Where different inflexions are usually identical, as in nominative and accusative plural forms, the form is indexed under the major form. Similarly, the gloss ‘past indicative singular’ usually refers to both first and third person singular without distinction.

Where difficulties might arise the head-word is cross-indexed. However cross references are not normally given for inflected forms of head-words, or where the variation is general. Variant spellings discussed in the text are often indicated within rounded brackets, for example ‘abær (e)’ for *aber*,

but the absence of such indication has no significance and especially should not be taken to imply the absence of any such variation.

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Volume 2: Morphology

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Preface

When Richard M. Hogg died suddenly on 6 September 2007 at the age of sixty-three, he left unfinished the present, second volume of his *Grammar of Old English*, of which the first volume appeared in 1992. In early 2001 he had shown me drafts of chapters 8 through 10 and asked me to critique them. Because of that prior acquaintance with the work, on the advice of Donka Minkova David Denison asked me, on behalf of Richard Hogg's widow Margaret, to look into the state of the work to determine whether it might be possible to complete it. With relatively minor omissions, RMH had completed drafts of chapters 8 through 11, and half of chapter 12, though he had not yet made any revisions to his initial drafts. My own contributions to the present volume comprise the remaining chapters and revision of the material he left. The chief manner of revision was to supply references to and discussion of scholarship published in the interval since the appearance of the latest editions of the grammars of Sievers–Brunner and Campbell. RMH undoubtedly intended to add such references in the course of revision, as in his drafts he had not cited more than a few even of his own very many publications.

Although my revisions have been extensive, they are for the most part superficial, as I have avoided altering the fundamentals of RMH's approach. One notable exception is in regard to the analysis of Proto-Indo-European noun morphology and its development in early Germanic, as treated in chapter 9, which has been brought into line with more current views. Another is in regard to both the synchronic and the diachronic analyses of disyllabic noun and adjective stems, as presented in chapters 10 and 11, respectively. RMH's views on such matters were continually in course of development, and the analysis offered in the chapter drafts did not agree entirely with views he advocated in publications subsequent to their drafting, particularly Hogg (2000) and Bermúdez-Otero and Hogg (2003). Given his unsettled views, it seemed best to look into the matter afresh,

and this resulted in some rather thoroughgoing changes. Otherwise, I have generally avoided altering the framework, methodology and conclusions of what he left us.

This is particularly true of the theoretical underpinnings of the work. One of the innovative features of the first volume was its employment of generative phonological theory. But the theoretical framework adduced was essentially that of N. Chomsky and M. Halle's *Sound Pattern of English* (1968), and its rule-governed model of phonology has lost ground in the intervening years to Optimality Theory, Exemplar Theory, and other recent approaches. RMH himself came eventually to question the viability of the rule-governed model, for example in Hogg (2000). It would not, however, have been possible to revise the chapter drafts in conformity with the theory of constraint ranking, or other recent theoretical developments in phonology and morphology, without altering fundamentally the nature and aims of the work. Under the circumstances, it was necessary to preserve the work's original premises (though some of the discussion of generative rules has been moved to the notes) so that it might serve two particular purposes. The first of these was to ensure that RMH's work was made available to scholars with as little tampering, in regard to fundamentals, as could be managed. The value of this, it is hoped, will be particularly apparent in regard to his innovative separation of diachronic and synchronic considerations in the analysis of noun morphology, as represented by chapters 9 and 10, respectively. The second purpose was to include full treatment, or as full as was feasible, of scholarship on Old English morphology, especially scholarship subsequent to that of Sievers–Brunner and Campbell, since there is currently no convenient way to locate relevant scholarship of the past 40 years on Old English morphology but by careful bibliographical study. It is hoped that these two purposes of themselves will be seen to justify the work. As RMH acknowledged in the preface to the first volume, with characteristic modesty, the work was intended to supplement rather than supplant the excellent grammars of Campbell and Sievers–Brunner (and, for the phonology, it might be added, that of Luick). The same is true of the present volume, and readers will find that they are often referred to those grammars for a fuller or alternative account of particular points.

RDF

Acknowledgments

RMH's *Grammar of Old English* of course would never have reached completion but for the foresight of David Denison, Margaret Hogg, and Donka Minkova, to whom my profoundest thanks are due. I am equally indebted to three anonymous readers for the press, who studied the typescript with extraordinary care and suggested changes that have improved the work decisively. I wish also to express my gratitude to Danielle Descoteaux, Acquisitions Editor for Linguistics at Wiley-Blackwell, who perceived the value of completing a work such as this, despite the special difficulties involved in producing the second volume after the lapse of so many years, and to Julia Kirk, Editorial Assistant, who smoothed over those difficulties with such a sure hand as to make it all look easy. Glynis Baguley performed the copyediting with consummate skill. Janet Moth completed the project management, and to her many thanks are due for stepping in at short notice. My greatest debt, however, is to my partner of more than twenty years, Brian Powell, whose constant and selfless help and support are grounded in the bedrock of a sociologist's prudent unconcern for dead languages.

List of Abbreviations

General

Angl	Anglian
C	consonant
DOEC	<i>Dictionary of Old English Corpus</i> (Healey, 2004)
eKt	early Kentish
eME	early Middle English
eNbr	early Northumbrian
eOE	early Old English
EWS	Early West Saxon
Gmc	Germanic
Got	Gothic
Grk	Greek
IE	Indo-European
IGmc	Inland Germanic
IPA	International Phonetic Alphabet
Kt	Kentish
INbr	late Northumbrian
Lat	Latin
Li	<i>Lindisfarne Gospels</i>
IOE	late Old English
LVD	<i>Liber Vitae Dunelmensis</i>
LWS	Late West Saxon
MCOE	<i>A Microfiche Concordance to Old English</i> (Healey & Venezky, 1980)
ME	Middle English
Merc	Mercian
Nbr	Northumbrian
NGmc	North Germanic

NMerc	North Mercian
NNbr	North Northumbrian
NSGmc	North Sea Germanic
NWGmc	North-West Germanic
nWS	non-West Saxon
OE	Old English
<i>OED</i>	<i>Oxford English Dictionary</i>
OFris	Old Frisian
OHG	Old High German
ON	Old Norse
OSax	Old Saxon
PDE	Present-day English
PGmc	Proto-Germanic
PIE	Proto-Indo-European
Pre-OE	Pre-Old English (see §2.14n1)
Ru1	<i>Rushworth Gospels</i> (Mercian gloss)
Ru2	<i>Rushworth Gospels</i> (Northumbrian gloss)
SE	South-Eastern
Skt	Sanskrit
SNbr	South Northumbrian
V	vowel
WGmc	West Germanic
WMerc	West Mercian
WS	West Saxon

Note: The short titles of individual texts are those employed by the *Dictionary of Old English* and its *Corpus* (Healey 2004).

Special

a	aanmerkung (in citations of Dutch texts)
A	Anmerkung (in citations of German texts)
fn.	footnote (in citations of English texts)
n	note (in citations of English texts)
†	form not found in the <i>DOEC</i>
*	reconstructed or hypothetical form
**	form not known to occur in Old English

Grammatical

adj.	adjective
acc.	accusative

comp.	comparative
dat.	dative
def.	definite
du.	dual
fem.	feminine
gen.	genitive
imper.	imperative
ind.	indicative
indef.	indefinite
inf.	infinitive
infl.	inflected
instr.	instrumental
loc.	locative
masc.	masculine
neg.	negated
neut.	neuter
nom.	nominative
pa.	past
part.	participle
pl.	plural
pr.	present
pret.	preterite
pron.	pronoun
sg.	singular
subj.	subjunctive
sup.	superlative
vb.	verb
wk.	weak
1sg., 2sg., etc.	first person singular, second person singular, etc.

Preliminaries

1.1 The discussion of Old English inflexional morphology in a work such as this presents particular difficulties which must be made explicit at the very start. These difficulties arise from the fact that the structure and organization of inflexion underwent considerable change both during the relevant prehistory of Old English and within the Old English period itself.¹ Major structural changes occurred particularly with the declension of nouns and adjectives, see §§1.2–4, and it is naturally with these declensions that the most serious difficulties arise. In verbs, the third major word class, changes, although frequent, are either less often of such a far-reaching structural nature or affect all verbs in the same way, and therefore the difficulties anticipated here do not arise to the same extent.

¹ For a general overview of the structural shifts alluded to here, see Hogg (1992c).

1.2 In the Indo-European protolanguage the inflexional system of nouns was originally root-based. That is to say, the noun consisted of a root to which one or more suffixes might be added to form the stem, and to that stem were added inflexions that were originally the same for all stem classes. By late PIE this orderly system was already in process of change, with certain exceptions to the rule that inflexions were the same in all stem classes and to the rule that the stem was formed the same way throughout a given paradigm, with only allophonic and ablaut variations. This process of change continued in the Germanic protolanguage, with the result that in certain stem classes the inflexion attracted to itself the stem termination, particularly if it was vocalic. Thus, we may reconstruct a shift illustrated by the following singular paradigms, representing the change of PIE **wlk^w-o-s* ‘wolf’, comprising root **wlk^w-* plus stem-forming suffix **-o-* plus inflexion **-s*, to late PGmc **wulf-az*, comprising stem **wulf-* plus inflexion **-az*:

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	PIE		PGmc
<i>Nom.</i>	*w _l k ^w -o-s	>	*wulf-az
<i>Acc.</i>	*w _l k ^w -o-m	>	*wulf-ã
<i>Gen.</i>	*w _l k ^w -o-so	>	*wulf-as(a) ¹
<i>Loc.</i>	*w _l k ^w -o-y	>	*wulf-ai

Although in the nom.gen. PGmc *-a- could still have been regarded as belonging to the stem rather than the inflexion, by late PGmc, *-m had been lost in the acc., with nasalization of the preceding vowel, which then had to be regarded as the sole inflexion rather than a combination of suffixal vowel plus inflexion; and *-ai in the locative was a diphthong, a unitary phoneme, and thus the inflexion must be regarded as *-ai rather than *-i. A similar development affected the PIE etymon of PDE *mead*, with different results:²

	PIE		PGmc
<i>Nom.</i>	*medh-u-s	>	*með-uz
<i>Acc.</i>	*medh-u-m	>	*með-ũ
<i>Gen.</i>	*medh-ew-s	>	*með-euz
<i>Dat.</i>	*medh-ow-ey	>	*með-ëu ³

The vowel alternations in the PGmc inflexions do not lend themselves readily to the supposition that the endings might have been analysed as stem formative + inflexion. Note that the gen.sg. inflexion on this noun was differentiated from that of *w_lk^w-o-so already in PIE.

¹ For the gen.sg. inflexion of *a*-stems, see Hogg (1992b: §3.28) and references.

² The variation *-u- ~ -ew- ~ -ow- in the stem is due to PIE ablaut phenomena.

³ The Gmc dat. is not actually a direct development from the PIE dat., see Bammesberger (1990a: 153).

1.3 The paradigms given in §1.2 illustrate the rise of different declensional classes distinguished not on the basis of stem endings, as in PIE, but on the basis of the variety of inflexions attached to the now truncated stem. The paradigms illustrate just two of the sets of inflexions that arose in this manner; the full range of inflexional sets is examined in chapter 2. Subsequent developments were chiefly of two types. Firstly, inflexional endings were further reduced, resulting either in the loss of the ending altogether, as very commonly happened in the nom. and acc. sg., see for example Hogg (1992b: §§3.31, 6.2), or in reduction of the number of contrasts amongst the endings. In some declensional categories, loss of the original inflexional endings caused what were originally derivational suffixes to serve as inflexions, particularly those nouns bearing a PIE suffix in *-n-,¹ see especially §§2.84–5. Secondly, the early Gmc languages in general seem to have tolerated relatively little

paradigm allomorphy in declension. When irregularities did develop, they were very commonly removed on an analogical basis. Thus, for example, WGmc nom.sg. **sazī* should have resulted in OE **seġe*, but instead only *seġ* ‘man’ occurs, since the stem **sagg-* found in all the other cases was levelled into the nom.sg., see §2.23. Such paradigm regularization has operated throughout the history of the Gmc languages; very likely it is responsible for the PGmc gemination of approximants described in Hogg (1992b: §3.17), see Fulk (1993).

¹ These are the so-called weak nouns. The use of the terms ‘strong’ and ‘weak’ to denote vocalic stems and *n*-stems (less often all consonantal stems), although common and due originally to Jakob Grimm, has little to recommend it, and we avoid it here in the description of nominal morphology; see §4.1 on the use of analogous terminology in connexion with adjectival morphology. For further information on the usage, see *OED*: **strong** *a.23*.

1.4 In Gmc there had developed a syntactically motivated distinction between definite (or ‘weak’) and indefinite (or ‘strong’) adjectives. Broadly speaking, the definite form of the adjective was used after a demonstrative or its equivalent, i.e. a possessive NP or possessive pronoun, whilst the indefinite form of the adjective was used elsewhere; for further details and qualification, see §§4.1–2 and Mitchell (1985: §§102ff.). The comparative forms always follow the definite declension, whilst the superlative may be definite or indefinite. Quantifying adjectives, e.g. *eall* ‘all’, *monig* ‘many’, *sum* ‘some’, are usually indefinite, by virtue of their syntax, although for most such words some definite forms exist.¹ A few adjectives are indeclinable, notably the quantifier *fela* ‘many’, see further §4.17.

¹ There are apparently no definite forms of *sum*, as might be predicted from its syntax.

1.5 The indefinite declensions of adjectives derive in principle from the same PIE patterns as are found in nouns, with stems ending in a vowel referred to as vocalic stems. However, the morphology of indefinite adjectives incorporated a number of pronominal inflexions, see §4.9–13 for details. The definite declension of adjectives is a Gmc innovation and is plainly the result of the adoption of the endings of the *n*-stem noun declension.¹ Consequently, the principal changes in adjective declensions during the OE period closely matched those in the corresponding noun declensions, albeit with some minor variations. A notable characteristic of the definite adjective declension is that there are no distinctions of gender in the plural, although this is due directly to the normal development of the *n*-stem noun declension.

¹ There was in PIE a substantivizing/individualizing suffix **-ōn-*, as in Gk. *γάστρον* ‘paunchy’, ‘fat-gut’ (cf. *γαστήρ* ‘paunch’). Words bearing it were most commonly in

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definite usage, and it is likely that this is the origin of use of the *n*-stem suffix with definite adjectives in Gmc, see Krahe and Meid (1969: II, §53).

1.6 The kinds of structural changes outlined in §§1.2–5 and their scope mean that it is not appropriate to provide an historical survey of nominal (and adjectival) morphology which would suggest a continuity of structure from earliest Germanic to late OE. Rather, it is necessary to provide both an account of the Gmc system of inflexional morphology as it relates to the emergence of the OE forms and an account of how that system was restructured during the OE period. For this reason the sections on noun morphology are divided into two chapters, the first, chapter 2, dealing with the topic in terms of the Gmc system, the second, chapter 3, dealing with the OE restructuring of that system. For chapter 2 the principal data discussed will be from texts up to *c.*925, especially EWS or Alfredian texts, but also other major texts from other dialects of the same period, e.g. the Mercian gloss on the Vespasian Psalter, whilst for chapter 3 the principal data will be from texts of *c.*1000, especially LWS or Æthelwoldian and Ælfrician texts, but also major texts from other dialects such as the glosses to the Lindisfarne and Rushworth Gospels.¹ This approach is not used in dealing with the morphology of adjectives, since their development can in these respects be related to that in nouns.

¹ For discussion of the dialects and their texts, see Hogg (1992b: §§1.7–10).

1.7 One unfortunate consequence of this methodology is that OE nouns may be classified as belonging to two (or more)¹ declensions, according to whether membership relates to the Gmc or OE inflexional system. However, it is hoped that the context of discussion will be sufficiently clear to avoid confusion.

¹ As will be observed in chs. 2–3, nouns could, because of class transfer during the period, belong to more than one declension within either structure.

1.8 Although the OE pronominal system can be traced back to PIE, it is not possible to give a coherent overview of pronouns' morphological structure as a whole. From a morphological point of view the core members of the pronoun system are the demonstrative pronouns, i.e. OE *sē*, *sēo*, *hæt*, to which are closely related the interrogative pronouns *hwā*, *hwæt* and the anaphoric (third person) pronouns *hē*, *hēo*, *hit*. These pronouns share some morphology with strong adjectives, see §§1.5, 4.9–13. The personal pronouns *ic* 'I', *þū* 'thou' have quite different morphological systems, but the possessive adjectives derived from the genitive of the personal pronouns, e.g. *mīn* 'my', decline as strong adjectives.

1.9 The characteristically Gmc distinction between strong and weak verbs is one which is well maintained during the OE period. Although the formation of strong verbs had its origins in PIE, Gmc developed a somewhat different structure which persisted into OE. The crucial characteristic of the Gmc system was the replacement of aspectual categories by a binary opposition between present and preterite tense, a distinction which was indicated in the inherited primary verbs by vowel gradation or ablaut. Derived or secondary verbs in PIE had present-tense forms only, and the major innovation in Gmc was the development of preterite forms through the addition of a dental suffix. This Gmc innovation of two distinct types of preterite, one formed by IE ablaut, the other by the addition of a new dental suffix, creates the typological distinction between strong and weak verbs. In OE the strong verbs maintained the Gmc system of marking tense and person by vowel variation, albeit in a simplified and obscured form, but the weak verbs, in parallel to the majority of nouns, gradually shifted from a root-based to a stem-based method of conjugation. In OE this did not have quite the same dramatic morphological consequences as the parallel nominal shift, and therefore the development of verbs is discussed within a single framework.

1.10 Alongside these major classes of verbs there existed a small group of preterite-present verbs. Such verbs formed their present tense according to the system for the preterite of strong verbs, and then formed a new preterite by the addition of a dental suffix. A small number of other verbs of very high frequency, *bēon* 'be', *willan* 'will', *dōn* 'do', *gān* 'go', reflecting, for the most part, the ancient class of athematic verbs, by the time of OE have to be classed simply as irregular.

1.11 The morphology of OE prepositions and conjunctions is not sufficiently complex to warrant separate treatment in a grammar such as this; some brief remarks about them will be found in §§4.76, 5.4n2. This grammar is, moreover, chiefly concerned with inflexional morphology, though some attention to various aspects of compounding may be found in the places just cited and in §§3.144–7. To keep the treatment of morphology within manageable proportions and a coherent framework, it has proved necessary to exclude other word-formation issues that might have been pursued, such as the synchronic status of the distinction between roots and affixes, and between affixes and inflexions, the productivity of individual morphemes, and headedness in compounding, among many others.

1.12 There are few handbooks in English which provide a survey of Gmc inflexional morphology, and Prokosch (1939) remains the most valuable of these. Brief guides may be found in Bammesberger (1984a, 1992a), and

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Wright (1954) offers a full survey of Gothic. On verbs, valuable information may be found in Fullerton (1977) and Mailhammer (2007), the latter on strong verbs only. The choice in German remains much wider, including such major texts as Streitberg (1896), Hirt (1932) and Krahe and Meid (1969), which are frequently supplemented by works on individual topics such as Bammesberger (1990a) for nouns, Seebold (1970) for strong verbs and Bammesberger (1986b) and Rix (2001) for verbs in general. Markey, Kyes and Roberge (1977) offers a comprehensive bibliography on all topics relevant to Gmc, Seymour (1968) on word formation. Specifically on OE, the historical bibliographies of Tajima (1988) and Fisiak (1987) are valuable. For more recent bibliographical information, the annual *Linguistic Bibliography / Bibliographie Linguistique* is most comprehensive; more current are the annual bibliographies in the journals *Anglo-Saxon England* and *Old English Newsletter*, the latter also on line at <<http://www.oenewsletter.org/>>. Some useful introductions to Indo-European backgrounds are Lehmann (1993), Beekes (1995), Szemerényi (1996), Meier-Brügger (2003), Mallory and Adams (2006), Clackson (2007) and Fortson (2010).

Nouns: Stem Classes

I Early backgrounds

2.1 In PIE, nouns were formed by the addition of inflexions either to a thematic stem, i.e. a stem that ended in the theme vowel that appeared as **o* or **e*, or to an athematic stem, i.e. one lacking the theme vowel. Thus is reconstructed thematic acc.sg. **Hékw-o-m* ‘horse’, comprising a stem made of root **Hékw-* plus theme vowel **-o-*, to which was added the inflexion **-m*, whilst athematic acc.sg. **péd-ṃ* ‘foot’ lacks the connecting theme vowel, with the result that the inflexion **-m* becomes syllabic, on a purely allophonic basis. The athematic stems may add the inflexions directly to the root (i.e., the stem comprises solely a root, without any suffix or theme vowel), in a sub-class called root stems, of which **péd-* is an example, or the stem may be formed by the addition of one or more suffixes to the root, for example **pH-tér-* ‘father’.¹ Hence, we have the following possible combinations in nouns in the accusative singular:

root + inflexion, e.g.:	<i>*Haig-ṃ</i> ‘oak’
root + theme vowel + inflexion, e.g.:	<i>*weǵh-o-m</i> ‘way’
root + suffix + inflexion, e.g.:	<i>*dhǵhm-on-ṃ</i> ‘man’
root + suffix + theme vowel + inflexion, e.g.:	<i>*penk^w-r-o-m</i> ‘finger’

and similar constructions in which there is more than one suffix attached to the root, as in **mṛ-t-r-o-m* ‘murder’. Already in late PIE certain sound changes were beginning to obscure the distinctions amongst the categories root, suffix, theme and inflexion, causing the agglutinative morphological structures of earlier PIE to become fusional, and this process continued in PGmc, where there tended to be reanalysis of stems and inflexions, such that in the thematic stems the theme vowel melded with the inflexion: e.g., PIE theme **-o-* plus nom.sg.masc. inflexion **-s* produced the unified PGmc

inflexion **-az*.^{2,3} The result was that in PGmc the inflexions added to the stem were no longer the same in each type of noun, but they varied from one stem class to another, e.g. nom.sg. masc. **-az* in what had originally been thematic stems, **-iz* in what had been athematic stems ending in *-i-*, **-uz* in what had been athematic stems ending in *-u-*, and so forth.⁴ With the theme vowel incorporated into the inflexion, in Gmc it is no longer entirely apposite to refer to thematic and athematic stems,⁵ and a more useful distinction (though not an entirely logical one) is that between vocalic and consonantal stems. As a result of the fusion of inflexions with stem endings in PGmc, the traditional terminology that identifies the various Gmc stem types as *a*-stems, *ō*-stems, *i*-stems, and so forth, is somewhat illogical, since *a*, *ō* and *i* were no longer part of the stem but of the inflexion, and such terminology must therefore be understood in diachronic perspective as referring to elements that had at an earlier time distinguished the stem types rather than the different sets of inflexions.⁶ For a full survey of PGmc noun morphology, see Bammesberger (1990a), also Ringe (2006: 168–80).

¹ On this analysis, by ‘suffix’ is meant any material that appears between the root and the inflexion; the theme vowel is thus, technically, a suffix. For an overview of PIE noun declension, see Szemerényi (1996: §§7.1–7), or any of the handbooks of PIE mentioned in §1.12.

² PIE **o* regularly produces Gmc *a*, and PIE final **s* after an unstressed vowel gives PGmc **z*, see Hogg (1992b: §4.4).

³ This metanalysis has its basis in a variety of sound changes in early Gmc. One is the loss of final **-m* after an unstressed vowel, which is then nasalized, e.g. in PIE acc.sg.masc. **-o-m* > PGmc **-ā*, see Hogg (1992b: §4.10), with the result that there remains nothing of the original inflexion but the nasal quality of the vowel, so that what was originally the theme vowel had now to be regarded as the inflexion. Similarly, PIE locative **-e-y/ -o-y* developed to a unitary phoneme in PGmc, a monophthong **-ī* and a diphthong **-ai*, respectively. Also, although [u] and [w] were allophones of a single phoneme in PIE, as were [i] and [j], the distinction was phonemicized over time, so that, for example, in the PGmc masc. *u*-stems the alternative stem-endings **-u-* in the nom.sg., **-eu-* in the gen.sg. and **-ew-* in the nom.pl. were no longer analysable as phonologically conditioned variants, and each had to be regarded as part of a fixed inflexional ending.

⁴ On this process of reanalysis of root, suffix and inflexion in Gmc, see Erdmann (1974) and Werner (1984). The former points out that in OE, stem classes may be defined in part by the types of inflexions added, in part by vowel alternations in the root (or stem, it may be added).

⁵ Confusingly, following some older analyses, Campbell (1977: §620) uses the term ‘athematic’ to refer solely to the sub-class of root-stems. This is done on the assumption that ‘theme’ refers to whatever suffix is used as the class-marking stem formative, e.g. **-i-* in *i*-stems, **-nd-* in *nd*-stems, and so forth, and in that sense root-stems are the only athematic nouns, lacking any ‘theme’ (i.e. suffix) between root and inflexion. But the term ‘thematic’ in IE linguistics now regularly refers to classes of words formed with the thematic vowel **e/o* and no other class. Even PIE **-ā-* in the commonest fem. class is suffixal in origin (**e/o* plus laryngeal consonant, to which inflexions were added directly), though some scholars refer to the Gmc *a*- and *ō*-stems (reflecting the PIE *o*- and *ā*-stems, respectively) as together comprising the thematic classes, e.g. Erdmann

(1974: 17), perpetuating an analysis of PIE prevalent before the discovery of laryngeal consonants, on which see §6.34n6. Thus, it will be less confusing if ‘athematic’ is understood to refer to all classes other than PIE *o*-stems. In that event, the term has little relevance to specifically Gmc linguistics.

⁶ It would perhaps be more logical to abandon the practice of referring to Gmc ‘stem’ types, because in Gmc often it is no longer the stem ending that is distinctive but the class of inflexions attached to the stem. Yet even if one referred to ‘*a*-nouns’, ‘*ō*-nouns’, etc., as does Campbell (1977), instead of *a*-stems, *ō*-stems, there would remain the inconsistency that, in PGmc at least, some classes are identified by the type of inflexion they take (*a*-nouns, *ō*-nouns, etc., see §2.2) and others by the stem ending (*nd*-nouns, etc.). The distinctions amongst Gmc *a*-stems, *ja*-stems, etc., are synchronically useful, and yet, as the most effective way of distinguishing the inflexional types, such terms are necessarily diachronic in nature. The discrepancy is addressed in this book, in part, by presenting a diachronic perspective in the present chapter and a relatively synchronic one in the next, as a companion to the present analysis.

2.2 Amongst vocalic stems, the vocalic element transferred from the stem to the inflexion by metanalysis could in early PGmc be any of four different vowels, namely **a*, *o*, *i*, *u*, and this led to four major declensions or noun-classes,¹ namely *a*-stems,² *ō*-stems, *i*-stems and *u*-stems. In the first two classes, the stem-final vowel could be preceded by **j*/³ or **w*, leading to the sub-classes of *ja*-, *wa*-stems and *jō*-, *wō*-stems. The other two vocalic classes originally paralleled each other in inflexion, having been distinguished only by metanalysed vowel, which was */i* or */u*. The principal consonantal class bore a suffix ending in **n* and hence is known as the class of *n*-stems. Within the *n*-stems there was originally in Gmc a distinction between nouns in which *n* was preceded by **ō*-, hence *ōn*-stems, and a small group of feminine abstracts in which *-n*- was preceded by **ī*-, hence *īn*-stems. The distinction is plain in Gothic, e.g. *tuggō*, gen. *tuggōns* ‘tongue’: *managei*, gen. *manageins* ‘multitude’. For the history of the latter in OE, see further §§2.88–90. In addition to *n*-stems there were, however, other, less frequent consonantal nouns with PIE stems ending in **t*/*s*, **t*/*s* and **n* + dental stop, which give rise to Gmc *r*-stems, *s*-stems (or *z*-stems),⁴ *þ*-stems and *nd*-stems.⁵ Naturally, there is no subdivision of the root-stems.

¹ In order to distinguish the historical origins and affiliations of nouns from the synchronic properties discussed in ch. 3, we use the term (*stem*-)class for the historical morphological structure and the term *declension* for the synchronic structure.

² *a*-stems are sometimes called *o*-stems, because PGmc **a*/*o* derives from PIE **o*/*o*. Similarly, *ō*-stems are sometimes called *ā*-stems, since they had PIE **a*/*ā* > PGmc **o*/*o*, see Hogg (1992b: §3.3). Unsurprisingly, confusion can occur, but in the context of OE it is preferable to use the nomenclature associated with the development of the vowels in Gmc rather than in the original PIE system. For the contrary view, see Prokosch (1939: 227), Brunner (1965: §235).

³ **j*/ *> *ij*/ by Sievers’s Law in PGmc, see Hogg (1992b: §4.6).

⁴ The *s*-stems are occasionally referred to as *z*-stems, since the PIE **s* of the suffix, where it survives in NWGmc, is reflected as *r* (or runic *ᚱ*) < **z*. Since **z* is never reflected as such outside of Gothic, the term ‘*z*-stems’ seems no more desirable than ‘*s*-stems’.

⁵ If the *n*-stems are called weak nouns, see §1.2n4, then the other consonantal stems are usually classed as minor declensions. This latter term is used differently in this work to refer to synchronic declensions whose membership consists of a closed set, see §3.4.

2.3 There was a correlation between grammatical gender and stem class in PGmc which was to continue into the OE period.^{1,2} Thus, in PGmc, *a*-stems were either masculine or neuter; *ō*-stems were all feminine; *i*-stems could be of any gender, as could *u*-stems, the consonantal *n*-stems, possibly the root-stems,³ and the rare examples of *þ*-stems. In all of the relevant stem types except the *a*-stems, the number of neuters was small and continued to decline up to and throughout the OE period and beyond.⁴ *r*-stems are distinguished in PGmc and OE by the fact that they are nouns of relationship, and hence they are either masculine or feminine on grounds of natural gender. The majority of *nd*-stems derive from an old pres.part. formation and are masculine, but there is a small minority of feminine *nd*-stems, mostly of a learned nature, see further §2.104. Finally, *s*-stems could be at least masculine or neuter, although only neuter forms survive as recognizable *s*-stems in OE.

¹ On the origins and development of the PIE gender system, see Szemerényi (1996: §7.1.2 and references).

² But during the OE period there begin to emerge plain signs of the subordination of gender to case assignment, most particularly in Nbr. This topic is discussed in §3.139.

³ On the absence of root-stem neuters in Gmc also, see Bammesberger (1990a: 188; and 205–6 regarding Got *fōn* ‘fire’). Like Campbell (1977: §622n2), we find no unambiguous trace of the alleged neuter dat.sg. **scrȳd* ‘garment’. PsGl(K) 21.19 has *scrȳd* acc.pl., but this is a text in which <u> is confused with <y>, see Sisam and Sisam (1959: §49).

⁴ There are no neuter *u*-stems in OE, although the indeclinable WS *fela* ‘many’ reflects an oblique form of a member of the *u*-stem class, whilst Angl *feolu*, *feolo* is from the nom.acc.sg.

2.4 It is possible to reconstruct eight distinct cases in PIE: nominative, vocative, accusative, genitive, dative, instrumental, locative and ablative. In the historical Gmc languages, however, just four cases are regularly found in noun classes: nominative, accusative, genitive and dative.¹ In respect of the dative, the inflexional endings are the result of a selection from dative, instrumental and locative forms, see further §§2.16–17, 2.43.² On the preservation of separate instrumental forms in the adjective and pronoun, see §§4.9, 4.17, 5.7, 5.10.

¹ But the instrumental case was plainly present in PGmc and persists in adjectival and pronominal paradigms, see G. Anderson (1958), Bammesberger (1994). In Gothic, the vocative is formally identical to the accusative.

² It is important not to equate the PIE dative with the PGmc/OE dative either morphologically or syntactically. See further Lass (1991).

2.5 Even in PGmc, for nouns there was only a singular : plural contrast in number. On the prehistory of the dual see, for example, Hirt (1932: §11), Prokosch (1939: 229–30). On the preservation of dual number in personal pronouns, see §§5.23–31, and on its syntactic uses, see Mitchell (1985: §§257–9).

2.6 It is possible to reconstruct typical PGmc nominal paradigms to illustrate the discussion in §§2.1–5. We give only the reconstructed paradigm at an early stage of PGmc for **stain-* (> OE *stān*) ‘stone’ (m.) supplemented by **wurð-* (> OE *word*) ‘word’ for neuter forms:

	Singular	Plural
<i>Nom.</i>	<i>*stainaz</i> (<i>*wurðam</i> ¹)	<i>*stainōsez</i> ^{2,3} (<i>*wurðō</i>)
<i>Voc.</i>	<i>*staine</i>	<i>*stainōsez</i> ²
<i>Acc.</i>	<i>*stainam</i> ¹	<i>*stainanz</i> (<i>*wurðō</i>)
<i>Gen.</i>	<i>*stainasa</i> ⁴	<i>*stainōm</i> ^{1,2}
<i>Dat.</i>	<i>*staināai</i> ²	<i>*stainomaz</i> ⁵
<i>Instr.</i>	<i>*stainō</i>	<i>*stainomiz</i> ⁵
<i>Loc.</i>	<i>*stainei</i>	—————
<i>Abl.</i>	<i>*stainōo</i> ²	<i>*stainomaz</i> ⁵

As may be observed, such forms mostly show the reflex of the PIE thematic vowel as Gmc **/a/* or its lengthened equivalent **/o:/*, see Hogg (1992b: §3.3). For the parallel structures in the other PGmc noun stems, see the relevant material in Bammesberger (1990a).

¹ Final **-m* would be lost before the end of the PGmc period, with nasalization of the preceding vowel.

² The sequence **-ōo-* or **-āa-* indicates a trimoric vowel, see Hogg (1992b: §6.27&cn1). It must be remembered, however, that **-ōo-* is an abstraction, not necessarily standing literally for a bimoric vowel followed by a monomoric one, but for whatever property characterized the vowels we call ‘trimoric’. It is possible, for example, that trimoric vowels represent a pair of vowels of any quantity, separated by hiatus, see Fulk (1992: 152–3nn2–3) and Jasanoff (2003) for references. The development of dat.sg. **-āai* from PIE **-o-ey* suggests as much, since the *a*-quality of the diphthong presumes a short vowel, there having been no unstressed **ā* in PGmc.

³ The nom.pl. ending **-ōsez* apparently results from contraction of PIE **-es* (the original ending, reflected in other classes in Gmc) with the thematic vowel **-o-*, resulting at first in **-ōos*. Because this did not resemble the ending found in other classes, **-es* was added once again by analogy, resulting in **-ōsez*. See further §2.8n2. Here the usual explanation is presented, although it is not unlikely that Jasanoff (2003: 22–3) is right that the contraction of PIE **-es* with thematic **-o-* produced a bimoric rather than a trimoric vowel.

12 Nouns: stem classes

⁴ **-asa* would be reduced to **-as* before the end of the PGmc period, see Hogg (1992b: §3.28). It is to be assumed that stress fell on the first vowel of the ending, i.e. **-ása*. This prevents the voicing (and otherwise consequent loss) of **/s/*, see *ibid.*: §§4.4, 4.10. Ablaut alternations seem also to have placed a stressed vowel before the suffix in the PIE athematic classes, see Bammesberger (1990a: 24). The reconstruction of the gen.sg. inflexion is problematic. For references, see Seldeslachts (1992: 294–5).

⁵ Although PIE **o* developed to Gmc *a*, preservation of *o* before *m* in medial syllables is a necessary assumption to account for the North and West Gmc dat.pl. ending *-um*, see Hogg (1992b: §3.34).

2.7 Some impression of the relative importance of the various noun classes in the development of OE can be gleaned from the following statistics regarding the 100 most frequent nouns in OE.¹ These statistics suggest the number of nouns in each class which OE inherited from PGmc (and hence do not show, for example, later, specifically OE, class changes). The figures are as follows: *a*-stems 47 (22 masc., 25 neut.); *ja*-stems 6 (3 masc., 3 neut.); *wa*-stems 1 masc.; *ō*-stems: 7; *jō*-stems 6; *wō*-stems 1; *i*-stems 9 (3 masc., 6 fem.); *u*-stems 4 (3 masc., 1 fem.); *n*-stems 9 (4 masc., 1 neut., 4 fem.); *r*-stems 3 (2 masc., 1 fem.); *nd*-stems 2; root-stems 5 (2 masc., 3 fem.).² The most noteworthy point to be drawn from these statistics is the dominance of masc. and neut. vocalic stems, which account for 55–60% of the total, cf. n2.

¹ The figures which follow are derived from the frequency lists in the OE *Microfiche Concordance* (Healey and Venezky, 1980). Some adjustments have been made to allow for the occurrence of homonyms. RMH, however, tested the results sufficiently to suggest that they are fairly accurate. In order to allow readers to test the results for themselves, the nouns are listed in the discussion of each of the individual stem classes.

² These statistics may be compared with those in Quirk and Wrenn (1957: §25). Quirk and Wrenn suggest that over the total vocabulary the distribution is as follows: ‘General Masculine’ 35% (here 29%); ‘General Neuter’ 25% (28%); ‘General Feminine’ 25% (20%); ‘*-an* Declension’ 15% (9%). The differences may be largely accounted for by the many ‘irregular’ nouns of high frequency, which account for 14% of nouns in the present count. Once this factor is taken into account, the figures are reasonably close. We must also reckon with the possibility that less frequently occurring nouns were, relatively speaking, over-represented in the ‘*-an*-declension’.

2.8 The endings to be reconstructed for early PGmc *a*-stems are represented in §2.6, where all that follows the stem **stain-* (or **wurð-*) developed as an inflexion. In the case of the dat.sg., the picture is more complex because of the interaction of instrumental and locative forms, see §2.17 and further references therein. The endings of Gmc nouns of other classes differ in part because the Gmc reflexes of the PIE inflexions fused with stem-final elements other than the **a* that reflects the PIE thematic vowel. Because they incorporate the reflexes of the same PIE inflexions, however, certain similarities between the Gmc *a*-stem inflexions and the inflexions of other classes are

observable, as will be demonstrated below in the discussion of individual classes. To make this plain, it will be useful to present here the reflexes of the PIE inflexions in the form they might be expected to take in early PGmc, before the widespread metanalysis of inflexions to incorporate stem endings. These might be expected to have appeared on all nouns except the \bar{o} -stems, which show a number of critical differences:¹

	Singular	Plural
<i>Nom.</i>	*-z, *-m (neut.)	*- \bar{o} sez, ² *- \bar{O} (neut.) ³
<i>Acc.</i>	*-m	*-nz, *- \bar{O} (neut.)
<i>Gen.</i>	*-sa	*- \bar{o} m ⁴
<i>Dat.</i>	*-ai	*-miz

¹ There are exceptions to this statement, for example the nom.sg. of many consonantal stems, but these will be discussed at the relevant places, since they do not significantly detract from the generalization, see further §2.79.

² PGmc raising of */e/, see Hogg (1992b: §3.30), would regularly have given *- \bar{o} siz at a very early stage. The diacritic on *o* reflects uncertainty about how to represent separately the originally inflexional element of what had become a trimoric vowel, see §2.6n3.

³ The ending *- \bar{o} in the nom.acc.pl.neut. in the *a*-stem paradigm given in §2.6 at this stage must be regarded as thematic. The etymological neuter inflexion proper was a laryngeal consonant.

⁴ Most (though not all) IE languages reflect a gen.pl. ending with a long vowel even in athematic stems, where the length cannot be due to contraction of thematic vowel + inflexional vowel, except by analogical processes. Gmc is here assumed to have inherited a similar ending.

2.9 For feminine nouns, endings comparable to those laid out for masc. and neut. nouns in §2.8 (i.e., the reflexes of the PIE inflexions in the form they might be expected to have taken in early PGmc, before the widespread metanalysis of inflexions to incorporate stem endings) may be reconstructed as follows. These should be compared especially to the reconstructed \bar{o} -stem endings given in §2.38:

	Singular	Plural
<i>Nom.</i>	*- \bar{O}	*-ez
<i>Acc.</i>	*-om	*-z ¹
<i>Gen.</i>	*- \bar{o} z	*- \bar{o} m
<i>Dat.</i>	*-ai	*-miz

In PIE these inflexions may have been more similar to those of §2.8, and the differences in large measure arose because of the influence of the preceding thematic element.

¹ See Bammesberger (1990a: 105).

II Vocalic stems

1 *a-stem nouns*

2.10 Nouns belonging to this class were either masculine or neuter. Differences in inflexion between the two genders were in PGmc restricted to the nom.sg. and the nom. and acc.pl.; in OE such differences persisted only in the nom.acc.pl. As outlined in §2.2, there were two sub-types in this class, *ja-* and *wa-*stems. Simple *a-*stems are discussed in §§2.11–18, *ja-*stems in §§2.19–26, and *wa-*stems in §§2.27–33.

(a) *Simple a-stems*

2.11 In Early West Saxon, *a-*stems typically were inflected according to the following paradigms:

	Masculine	Neuter	
Singular		Light	Heavy
<i>Nom.</i>	stān <i>stone</i>	scīp <i>ship</i>	word <i>word</i>
<i>Acc.</i>	stān	scīp	word
<i>Gen.</i>	stānes	scīpes	wordes
<i>Dat.</i>	stāne	scīpe	worde
Plural			
<i>Nom.</i>	stānas	scīpu	word
<i>Acc.</i>	stānas	scīpu	word
<i>Gen.</i>	stāna	scīpa	worda
<i>Dat.</i>	stānum	scīpum	wordum

As can be seen, there are clear differences in the nom.acc.pl. between light- and heavy-stemmed neuters, see also §2.12. Further, these are the only inflexions which distinguish the neuter *a-*stems from the masc. *a-*stems. Light-stemmed masc. nouns such as *wer* have the same set of forms as heavy stems such as *stān*.

2.12 This class has an extremely large membership, which prohibits a listing of the relevant nouns.¹ However, amongst the 100 most frequent lexemes, see §2.7, the following inherited *a-*stems occur:

- (a) masc.: *apostol* ‘apostle’, *biscop* ‘bishop’, *Crīst* ‘Christ’, *cyning* ‘king’, *dæg* ‘day’, *dēofol* ‘devil’,² *dīc* ‘ditch’,³ *dōm* ‘judgement’, *drihten* ‘lord’, *enġel* ‘angel’, *god* ‘god’,⁴ *heofon* ‘heaven’, *hlāf* ‘bread’, *hlāford* ‘lord’, *hund* ‘dog’, *middanġeard* ‘earth’, *mūþ* ‘mouth’, *prēost* ‘priest’, *stān* ‘stone’, *þeġn* ‘thane’, *weġ* ‘way’, *wer* ‘man’;

- (b) neut.: *bearn* ‘child’, *bebod* ‘command’, *ġebed* ‘prayer’, *blōd* ‘blood’, *folc* ‘people’, *fȳr* ‘fire’, *gāst* ‘spirit’,⁵ *ġēar* ‘year’, *godspell* ‘gospel’, *hēafod* ‘head’, *hūs* ‘house’, *land* ‘land’, *lēoht* ‘light’, *lif* ‘life’, *lof* ‘praise’, *mōd* ‘mind’, *mynster* ‘monastery’,⁶ *þing* ‘thing’, *weorc* ‘work’, *wif* ‘woman’, *wæter* ‘water’, *word* ‘word’, *wuldor* ‘glory’, *wundor* ‘wonder’, *yfel* ‘evil’.

¹ Kastovsky (1995: 232) estimates that 60% of OE nouns were thus declined.

² But also neut. in the sg., e.g. CP(H) 415 (3×) *ðæt dīoful*, and regularly neut. in the pl., hence nom.pl. *dīoflu*, *dīofla*, cf. *god* and n3. See also §3.138.

³ But in charters, where the noun most frequently occurs, it is often fem. and *dīc* dat.sg. is often found alongside *dīce*, see §§3.135, 143.

⁴ Occasionally (but not in Ælfric) neut.pl. to distinguish pagan gods from the Christian deity, as in Or 24.12, see §3.138.

⁵ Originally an *s*-stem, see §2.95ff.

⁶ Originally a *ja*-stem, see §2.20n1.

2.13 The paradigm of the *a*-stem *stān* may be traced back to a late PGmc paradigm of the following type:

	Singular	Plural
<i>Nom.</i>	*stainaz (neut. *wurðã ¹)	*stainōsiz (neut. *wurðō)
<i>Acc.</i>	*stainã ¹	*stainanz (neut. *wurðō)
<i>Gen.</i>	*stainas	*stainō ¹
<i>Dat.</i>	*staināai	*stainomiz

Most of these forms show the regular development of the PGmc forms cited in §2.6, but dat.pl. *-omiz* may be instrumental in origin, see Bammesberger (1990a: 45–6).

¹ See §2.6n1 on the loss of **-m*.

2.14 The regular phonological development of the forms cited above would produce a Pre-Old English¹ paradigm of the following type, except in the acc.pl.masc., for discussion of which see immediately below:

	Singular	Plural
<i>Nom.</i>	*stain (*word)	*stainōs (*wordu)
<i>Acc.</i>	*stain (*word)	*stainōs (*wordu)
<i>Gen.</i>	*stainas	*stainō
<i>Dat.</i>	*stainǣ	*stainum

The acc.pl. masc. inflexion must be explained as due to syncretism, with the inflexion of the nom.pl. having been extended to the acc.pl., see for example Campbell (1977: §571), Bammesberger (1990a: 46).²

¹ The term Pre-Old English (Pre-OE) is used here to refer to a time when all the PGmc and WGmc changes discussed in Hogg (1992b: chs 3–4) had occurred. It is a variable term, sometimes referring to so early a stage as that in which we find a system of unstressed vowels of the type outlined in Hogg (1992b: §6.1), prior to first fronting and associated changes, both in stressed and unstressed syllables. At other times it may refer to later, though still prehistoric, stages in the development of OE.

² A similar syncretism occurs in OHG also, where the common inflexion is *-a*, see Wagner (1986). This OHG parallel, together with the voiced nature of final **-z* in the PGmc acc.pl., renders it unlikely that the syncretism is almost entirely the result of normal phonological processes, as advocated by Prokosch (1939: §79i–k).

2.15 The paradigm presented immediately above leads in most elements directly to the EWS paradigm given in §2.11. Only the following inflexions require comment:

gen.sg.: **/a/ > /æ/* by first fronting (Hogg 1992b: §6.2) and later merger with */e/* (ibid.: §6.48).

dat.sg.: NWGmc **/ai/* is monophthongized to **/a:/ > */æ:/* (ibid.: §6.27(4)), which is shortened to */æ/* (ibid.: §6.28), which later merges with */e/*, as above.

nom.acc.pl.masc., gen.pl.: **/o:/* was shortened and lowered to */a/* (ibid.: §6.28).

nom.acc.pl.neut.: Word-final **/u/* was subject to apocope after heavy syllables (ibid.: §6.20) to give *word*, etc. but after light syllables it remained, hence *scīpu*, etc. This variation in inflexion also arose in disyllabic stems such as *hēafod* ‘head’ vs. *werod* ‘troop’, which have in LWS nom.pl. *hēafdu*, *werod* respectively, see ibid.: §§6.20, 24, but cf. §3.64 in the present volume on the historical situation of which this is an analogical refashioning. Such stems are prone to reanalysis during OE, see the discussion of the synchronic morphology in §§3.56ff.

2.16 The earliest OE texts have many spellings reflecting the earlier forms of the gen. and dat.sg. inflexions postulated in §2.15. Thus, for the gen.sg., eNbr texts such as CædH, BDS, RuthCr and the eMerc glossaries EpGl and ErfGl, together with a number of charters, all have frequent forms with inflexional *-æs*; for further examples both of this and of the equivalent dat.sg. inflexion *-æ*, see Hogg (1992b: §6.49). By the time of the EWS texts such early forms had been lost without significant exceptions.

2.17 In early texts, mostly before *c.*800, there are a number of forms in both masc. and neut. nouns which appear to demonstrate the existence of an instrumental case. These forms show an instr.sg. ending in *-i*, e.g. EpGl, ErfGl 83, CorpGl 230 *fācni* ‘cunning’, EpGl84, CorpGl 155 *braecli*, *brægli* ‘cloak’, EpGl, ErfGl 869, CorpGl 1720 *spellī* ‘story’, EpGl, ErfGl 699,

CorpGl 1450 *werci* ‘work’.¹ Despite their instrumental meaning, such forms must regularly derive from an original locative form, cf. loc. **stainei* (> **stainī*) in §2.6, also Bammesberger (1994).² It is notable that in these forms /i/ does not cause *i*-umlaut of the stem vowel except in the adverbial forms *ǣne* ‘once’, *hwēne* ‘a little’, see Hogg (1992b: §5.85(3)&cn3), also §2.18n3 in the present volume. The forms are curious but nevertheless seem to prove the existence of an instr.sg. in the earliest period.^{3,4} Additionally, RuthCr *blōdæ* ‘blood’ is usually analysed as an instr.sg., most recently by Bammesberger (1994: 102–3), but its origins, if genuine, are difficult, and the form is not entirely trustworthy because of the merger of unstressed /æ/ and /e/, see Hogg (1992b: §§6.48–9), similarly Wrenn (1943), King (1986: 77), Lass (1991).

¹ ErfGl 845 *uuegi* ‘way’ contrasts with EpGl *uuaega*, CorpGl 1700 *wega*.

² RuneThornhill 3 *on bergi* ‘on a mound’ shows apparently the same inflexion but with the original locative meaning. EpGl 494 *thys gēri* ‘in this year’ is a temporal locative.

³ On the persistence of unstressed /i/ up to 800, see Hogg (1992b: §6.53). The unstressed /i/ is not lost through syncope because at that time it was long, according to Hogg (ibid.: §6.28), though it should be assumed that *-i* was restored analogically after heavy stems if *ī* was shortened before high vowel syncope, as argued by Bliss (1967: 113–17), see Fulk (1992: §§187–93).

⁴ CP(H) 101.16, Dream 63 *hēafdum* ‘head’, both with locative meaning, appear to show a fossilized instr.sg. form in *-um*, which may be traceable back to PIE. Apparently parallel forms are *meolcum*, Angl *mīlcum*, which appear both as instr. and loc., and *nosum*, both particularly frequent in Bald’s *Leechbook*. For early discussion of these forms, see Cosijn (1882), Kluge (1891: 386), Brugmann (1903: §469.2), and for a more recent useful discussion with extensive references see Grant (1991), as well as Bammesberger (2001). The oddity of these forms and their distribution has never been fully explained, but the inflexion may signify an adverbial-like function.

2.18 Locative forms with zero inflexion are particularly frequent in compound place-names of the type *-hām -wīc*, see Dahl (1938: 50, 61–2) for examples, less frequently in other words, e.g. *-mynster*, *-stān*, *-tūn*, *-þorp*, see also §2.12n2. The same forms are regular with uncompounded *hām* ‘home’.¹ Temporal nouns such as *ǣfen* ‘evening’, *dæg* ‘day’, *morgen* ‘morning’ also show an endingless locative, especially in the phrases *on ǣfen*, *on dæg*, *todæg*, *on morgen*. During the OE period the endingless construction is gradually extended to other phrases such as *ǣlce dæg* ‘every day’,² which may suggest an idiomatization of the form, see Girvan (1931: §262a4).³ The origin of this endingless locative is disputed, but it may be that it is from a variant PIE locative **-ē*, which would develop as **-æ* in Pre-OE. It is then necessary to suppose that this final **-æ* would be subject to apocope, cf. Hogg (1992b: §6.20). But if **-ī* was shortened before high vowel apocope, see §2.17n3, at least some of the endingless forms may be true etymological locatives. For discussion of this difficulty and further references, see Dahl (1938: 51–5).

¹ The only possible example of *æt hāme* ‘at home’ is at JnGl(Li, Ru) 11.20, where it is more likely that the dat.sg. has been substituted. It may be that *dīc* dat.sg. is a further example, but see §2.12n3.

² Thus, CP has 5 examples of *ǣlce dæge*, 2 of *ǣlce dæg*, whilst ÆCHom has 1 of the former, 4 of the latter.

³ Or (4×) *on merġen* shows *i*-umlaut of the root vowel, which may be related to the adverbial forms discussed in §2.17, although the connexion is difficult. The same form is regular in Ælfric, and the parallel form *on mǣrġen* is regular in lNbr.

(b) *ja-stems*

2.19 In EWS, *ja*-stems typically were inflected according to paradigms of the following types:

	Masculine		Neuter	
	Light	Heavy	Light	Heavy
Singular				
<i>Nom.</i>	seċġ <i>man</i>	ende <i>end</i>	cynn <i>race</i>	wīte <i>punishment</i>
<i>Acc.</i>	seċġ	ende	cynn	wīte
<i>Gen.</i>	seċġes	endes	cynnes	wītes
<i>Dat.</i>	seċġe	ende	cynne	wīte
Plural				
<i>Nom.</i>	seċġas	endas	cynn	wītu
<i>Acc.</i>	seċġas	endas	cynn	wītu
<i>Gen.</i>	seċġa	enda	cynna	wīta
<i>Dat.</i>	seċġum	endum	cynnum	wītum

In these stems there are clear distinctions between originally light-stemmed and originally heavy-stemmed nouns of both genders and in both nom.acc.sg. and nom.acc.pl. For variations in the declension of polysyllabic nouns, see §§3.56ff. A further distinction occurs between light-stemmed nouns such as *seċġ* and light-stemmed nouns which have final *-r*, for their inflexion in EWS is as follows:

	Singular	Plural
<i>Nom.</i>	here <i>army</i>	herġas, heras
<i>Acc.</i>	here	herġas, heras
<i>Gen.</i>	herġes, heres	herġa
<i>Dat.</i>	herġe, here	herġum

2.20 This class has a fairly large membership, of which by far the largest subgroup is that of agentive nouns with the suffix *-ere*, e.g. *bæcere* ‘baker’, *bōcere* ‘scribe’, *leornere* ‘disciple’, *scīpere* ‘sailor’, *scōere* ‘shoemaker’, and many others. Amongst the 100 most frequent lexemes, see §2.7, the following inherited *ja*-stems occur:

- (a) masc. (i) light: *here* ‘army’, *cāsere* ‘emperor’;¹ (ii) heavy: *ende* ‘end’;
 (b) neut.: (i) light: *cynn* ‘nation’; (ii) heavy: *rīce* ‘kingdom’, *wīte* ‘punishment’.

Other examples include nouns such as: (a(i)): *bridd* ‘bird’, *brycg* ‘ridge’, *hyll* ‘hill’, *wecg* ‘wedge’; (a(ii)): *esne* ‘servant’, *hwāete* ‘wheat’, *hyrde* ‘shepherd’, *lāce* ‘physician’, *mēce* ‘sword’; (b(i)): *bedd* ‘bed’, *nebb* ‘beak’, *nett* ‘net’, *webb* ‘web’, *wedd* ‘pledge’, *wicg* ‘horse’; (b(ii)): *ārende* ‘message’, *stýle* ‘steel’, *wāge* ‘weight’, *yrfe* ‘inheritance’.²

¹ From Lat. *Caesar*. The *-ere* is reanalysed in OE as the agentive suffix discussed immediately above. But, conversely, *mynster* < Lat. *monasterium*, where no agentive function may be supposed, transferred to the *a*-stems.

² Also to be included here are *flicce* ‘flitch’, *stycce* ‘piece’, where the geminate consonant is not due to WGmc gemination but is of earlier origin.

2.21 Certain processes of affixation are associated with *ja*-stems. Thus, there are two further suffixes in addition to *-ere*: *-en(n)* (< WGmc **-innja*, **-unnja*), and *-et(t)* (< PGmc **-atja*, **-itja*), both of which form mainly neut. nouns; additionally, the prefix *ge-* is added to a large number of neut. collectives formed with the PGmc suffix **-ja-*. Typical examples of these types are:¹ *ǣfen* ‘evening’ (also masc.), *fæsten* ‘fortress’, *fæsten* ‘fast’, *wēsten* ‘desert’ (also fem., see §3.136); *bærnet* ‘arson’, *liġet* ‘lightning’ (also masc.),² *nyrwet* ‘narrowness’, *rēwet* ‘rowing’, *sāwet* ‘sowing’, *þēowet* ‘slavery’ (masc.), *þiccet* ‘thicket’; *gefylce* ‘troop’, *ġescȳ* ‘pair of shoes’, *ġetimbre* ‘building’, *ġeþeode* ‘language’, *ġewæde* ‘dress’, and many others.³

¹ On the usual absence of gemination in nom.acc.sg. of nouns with suffixal *-enn*, *-ett*, see §3.40. On the derivation of nouns in *-ett* from verbs of weak class I, see Wissmann (1975: 55–7).

² See further §2.47(4) on this noun as a fem. *jō*-stem.

³ Campbell (1977: §647n2) would include here *īren* ‘iron’, gen.pl. *īrenna*; but more likely this is an *a*-stem with assimilation of **-zn-* to **-nm-*, see Seebold (1984: 54). Adjective forms lacking the geminate, e.g. PsGl(A) *īrenu*, are then to be assumed to show a different assimilation, of **-s-z-* to **-z-*. On the dialect distribution of *īsern* and *īren*, see Kleinman (1997).

2.22 The inflexion of light-stemmed masc. *ja*-stem nouns can be exemplified by a PGmc paradigm which parallels that of the simple *a*-stems but with **/j/* preceding the inflexional vowel. This **/j/*, however, would have been **/ij/* after a heavy syllable by the process known as Sievers’s Law, see Hogg (1992b: §4.6). Hence, we can reconstruct the following late PGmc paradigms for masc. *ja*-stem nouns:

	Light	Heavy
Singular		
<i>Nom.</i>	*saʒjaz	*andijaz
<i>Acc.</i>	*saʒjā	*andijā
<i>Gen.</i>	*saʒjas	*andijas
<i>Dat.</i>	*saʒjāai	*andijāai
Plural		
<i>Nom.</i>	*saʒjōosez	*andijōosez
<i>Acc.</i>	*saʒjanz	*andijanʒ
<i>Gen.</i>	*saʒjōō	*andijōō
<i>Dat.</i>	*saʒjomiz	*andijomiz

The inflexion of neut. nouns differed only in the nom.sg., which was identical to the acc.sg., e.g. **kunjam*, **wītijam*, and the nom.acc.pl., e.g. **kunjō*, **wītijō*.

2.23 The expected development of the forms cited above would result in a Pre-OE paradigm of the following type parallel to the simple *a*-stems:

	Light	Heavy
Singular		
<i>Nom.</i>	*saʒi (*kunni)	*andī (*wītī)
<i>Acc.</i>	*saggi (*kunni)	*andī (*wītī)
<i>Gen.</i>	*saggjas	*andijas
<i>Dat.</i>	*saggjai	*andijai
Plural		
<i>Nom.</i>	*saggjōs (*kunnju)	*andijōs (*wītiju)
<i>Acc.</i>	*saggjōs ¹ (*kunnju)	*andijōs ¹ (*wītiju)
<i>Gen.</i>	*saggjō	*andijō
<i>Dat.</i>	*saggjum	*andijum

The suggested development above implies that nom.sg. *-az was lost before the time of WGmc gemination, giving **sagjaz* > **sagi* but that acc.sg. *-ā remained until after gemination, giving **sagjā* > **saggjā* > **saggi*. It is noteworthy, however, that ***seġe*, the expected reflex of **sagi*, never occurs in OE, the nom.sg. always being of the type *seġġ*, the development proper to the acc.sg. under this account. We must therefore assume, with Dahl (1938: 81–6), that only *-az was lost prior to gemination and that acc.sg. *seġġ*, neut.sg. *cynn* are regular forms, with the masc.nom.sg. re-formed with a final geminate on the analogy of syncretism of nom.acc.sg. in the simple *a*-stems, see also Hogg (1979: 68–73) and the discussion of the synchronic status of masc. *i*-stems in §§3.43–4. Alternatively, one might

suggest, following Campbell (1977: §576), see also Dal (1934), that both inflexions were lost prior to gemination, in which event all geminated forms in the nom.acc.sg. would be re-formations from the oblique forms or the plural.

¹ The inflexion *-ōs is extended analogically from the nom.pl., see §2.14.

2.24 The paradigms presented above, together with the assumption of syncretism in the nom.acc.sg., lead for the most part directly to the EWS paradigms presented in §2.19. However, the development of the original heavy stems and also of original light stems in *-r* requires special attention:¹

- (a) In the heavy stems the different developments of three types of inflexion are difficult: (i) **andī* > *ende* nom.acc.sg.; (ii) **andijas* > *endes* gen.sg., similarly dat.sg.pl. and nom.acc.pl.masc.; (iii) **wītiju* > *wītu* nom.acc.pl.neut., similarly gen.pl. In regard to (i), after the loss of **-az* from **andijaz*, final **-ij* became **-ī*,² but medial **-ij-* remained in the other cases, see Hogg (1992b: §6.27(2)). In regard to (ii) and (iii), in explanation of the attested forms it has been proposed that high vowel apocope was earlier than high vowel syncope, see *ibid.*: §§6.22, 25, with the consequence that high vowel apocope applies vacuously in such forms. Under the prescriptions of *ibid.*: §6.22 we might then assume **andijas* > **endjæs* > *endes* and **wītiju* > **wītju* > *wītu*. But on the older view of Sievers (1898: §177), **j* was lost in **wītiju*, and subsequently **wītiu* developed to **wītju*, in which **j* would have been lost just the way **j* of other origins was lost after a heavy syllable, e.g. in **kunnju*. Sievers's view is easier to reconcile with the historical facts about the interaction of high vowel syncope and apocope, as presented in §3.64, implying that **wītiju* need not have been subject to these processes at all: see the discussion in Fulck (2010c).³
- (b) The predicted development of light-stemmed nouns such as *here* would produce forms with */j/* before an inflexional vowel, thus *herges*, *herge*, *hergas*, *herga*. Although forms of this type can be found in EWS, they are already being replaced by forms without */j/*, i.e. *heres*, etc. For details and discussion of this synchronic restructuring see §§3.47–9.

¹ See §2.15 on the development of unstressed vowels in this sub-class.

² On whether this **-ī*, after shortening, would have remained or been apocopated and then restored analogically, see §2.17n3.

³ The explanation for the type *cynn* nom.acc.pl. < **kunnju* remains uncertain, see further Hogg (1992b: §6.25). Possibly **kunnju* > **kynnj* > *cynn*. Such an assumption need not conflict with the reconstruction **saggā* > **saggjā* > **saggi* offered in §2.23, since the loss of **-ā* was presumably earlier than high vowel apocope, resulting in syllabification of final **-j* in one instance and not the other. Alternatively, and perhaps

22 Nouns: stem classes

more plausibly, it may be supposed that post-consonantal *-j- was lost continuously in the prehistoric period, both before high vowel apocope (and thus affecting **kunnju*) and after both high vowel apocope and high vowel syncope (thus affecting **andijas* > **endjæs*).

2.25 The earliest OE texts have a number of spellings which reflect earlier forms of a variety of inflexions. For nom.acc.sg., examples of *-i* include: EpGl 1053, CorpGl 2075 *durheri* ‘folding door’,¹ EpGl 56, CorpGl 123, 250 *meeli* ‘basin’, EpGl 49, CorpGl 49, 1431 *steeli*, *staeli* ‘steel’, LdGl 140 *teblheri* ‘gambler’,² †LVD 103, 319 *Hiordi* pers. name, see further Hogg (1992b: §6.53) and Dahl (1938: 109).^{3,4} For gen.sg., note CædH *rīcaes*, *cynnæs*.⁵ It is notable that even in the earliest texts *-here*, when it is the second element of a compound, never retains *-j-* in the gen.dat.sg. In texts such as LVD, compounds show a high number of nom.acc.sg. forms with *-i*, e.g. †LVD 11 *Wulfheri*.

¹ Alongside EpGl 925, CorpGl 1948 *durhere*.

² Alongside EpGl 7, CorpGl 111 *teblere*.

³ Note also EpGl 24 *merici* ‘parsley’, glossing Lat. dat. *apio*, but possibly nom., cf. CorpGl 182 *merice*.

⁴ CorpGl 159 *dili* ‘dill’, alongside EpG 21 *dil* with a simplified geminate, is probably, in view of the several later examples of *dile*, an *i*-stem, see also Wynn (1956: 110) and, for an opposing view, Dahl (1938: 87), followed by Pfeifer (1974: §77).

⁵ Similar examples for the dat.sg. seem to be absent from this stem class, but note the apparent instr.sg. of EpGl 374, CorpGl 733 *geddi* ‘song’, cf. §2.17.

2.26 Historically, the *ja*-stems can be distinguished from *a*-stems in two ways: (i) the occurrence of geminate consonants in original light stems, such as *secġ*, *cynn*; (ii) the occurrence of *i*-umlaut, cf. PGmc **sagjaz*, **kunnjam*. The presence of gemination as well as *i*-umlaut also distinguishes, regardless of inflexional patterns, *ja*-stems from *i*-stems, which show only the latter, but cf. §3.41. A third distinction is created by the presence of final *u* in the nom.acc.pl. of neut. nouns such as *wītu*.

(c) *wa*-stems

2.27 In EWS, *wa*-stems typically were declined according to paradigms of the following types:

	Masculine	Neuter
Singular		
<i>Nom.</i>	bearu <i>grove</i>	searu <i>device</i>
<i>Acc.</i>	bearu	searu
<i>Gen.</i>	bearwes	searwes
<i>Dat.</i>	bearwe	searwe

Plural

<i>Nom.</i>	bearwas	searu
<i>Acc.</i>	bearwas	searu
<i>Gen.</i>	bearwa	searwa
<i>Dat.</i>	bearwum	searwum

A significant number of *wa*-stems are nouns in which the *-w-* was directly preceded by a vowel or diphthong. The typical inflexion of such nouns in EWS may be exemplified by masc. *þēow* ‘servant’, see further §2.30:

	Singular	Plural
<i>Nom.</i>	þēow <i>servant</i>	þēowas
<i>Acc.</i>	þēow	þēowas
<i>Gen.</i>	þēowes	þēowa
<i>Dat.</i>	þēowe	þēowum

2.28 There are fewer *wa*-stems than there are *ja*-stems, and notably there are no significant phonological effects of such processes as syncope and high vowel apocope to be reckoned with, as there are in connexion with the *ja*-stems. Amongst the 100 most frequent lexemes, see §2.7, the only example of a *wa*-stem noun is *þēow*.¹ In discussing *wa*-stems it is useful to distinguish between nouns whose root ends in a consonant and those whose root ends in a vocalic element. Thus, other examples in addition to *þēow* include:

- (a) with a consonant before *-w-*: *bearu* ‘grove’ (masc., no other examples), *bealu* ‘evil’, *codu* ‘cud’, *melu* ‘meal’, *smeoru* ‘fat’, *teoru* ‘tar’ (all neut.) In such words that contain a diphthong, the diphthong in the nom. acc.sg. is best analysed as showing extension of breaking from inflected forms in which /l/ or /r/ was followed by /w/, see Hogg (1992b: §§5.22n3&6, 5.105n2).
- (b) (i) stems with an original vowel or diphthong before *-w-*, resulting in an OE diphthong in the root: *bēow* ‘barley’,² *dēaw* ‘dew’ (masc. and neut.), *gēbrēow* ‘lamentation’ (neut.?), *sēaw* ‘juice’ (neut.), *þēaw* ‘custom’ (masc.),³ all with Gmc diphthongs, and *cnēow* ‘knee’, *strēaw* ‘straw’, *trēow* ‘tree’ (all neut.), *hlēow* ‘shelter’ (masc. or neut.), all (like *þēow*) with diphthongs of WGmc origin. For the resolution of the distinction between the types in OE, see §§3.43–9.
- (ii) stems with an original vowel or diphthong before *-w-*, not resulting in an OE diphthong in the root: *brūw* ‘porridge’, *hlāw* ‘mound’,⁴ *īw* ‘yew’, *slīw* ‘tench’, *snāw* ‘snow’, *Tīw* ‘Tiw’ (all masc.), *brāw* ‘body’ (neut.).⁵

¹ From which are derived *lāreow* ‘teacher’, *latteow* ‘leader’, obscured compounds of *þēow*.

² Probably neut., cf. ON *bygg*, OSax *beu*.

³ Campbell (1977: §584) groups *þēaw* with *þēow* and other words which developed a diphthong in West Germanic, but it contains a Germanic diphthong, see Fulk (1992: §164).

⁴ Also *hlēw* ‘mound’ with *i*-umlaut, suggesting an original neut. *s*-stem, see §2.95.

The noun is occasionally neut. in late texts, see §3.136.

⁵ Also *hrēw* with *i*-umlaut, like *hlēw*, see n4 above.

2.29 The inflexion of *wa*-stem nouns can be exemplified by a reconstructed paradigm which parallels that of the simple *a*-stems, but with */w/ preceding the inflexional vowel. Hence we may assume the following late PGmc paradigm for masc. nouns, using the etymon of OE *bearu* to exemplify masculine inflexion, with specifically neuter forms represented by the etymon of OE *searu*:

	Singular	Plural
<i>Nom.</i>	*barwaz (*sarwã)	*barwōosez (*sarwō)
<i>Acc.</i>	*barwã	*barwanz (*sarwō)
<i>Gen.</i>	*barwas	*barwōō
<i>Dat.</i>	*barwāai	*barwomiz

2.30 The expected development of the forms cited above would result in a Pre-OE paradigm of the following type parallel to the simple *a*-stems:

	Singular	Plural
<i>Nom.</i>	*baru (*saru)	*barwōs (*saru)
<i>Acc.</i>	*baru	*barwōs (*saru)
<i>Gen.</i>	*barwas	*barwōō
<i>Dat.</i>	*barwai	*barum

2.31 Although the further development of these forms is generally regular, several WGmc changes involving */w/ led to a complex set of allomorphic variations:

- (1) The loss of the nom.acc.sg. inflexion would have vocalized */w/, to give forms such as **baru*. Historically, the diphthongal forms of EWS such as *bearu* are best viewed as showing analogical extension of breaking from inflected forms in eOE, see §2.28(a), although synchronically the situation may be different, see §3.42.
- (2) */w/ was lost wherever it stood before */u/, see Hogg (1992b: §4.7), hence nom.acc.pl.neut. **saru*, whose further development is as in (1) above. The same should occur in the dat.pl. of all *wa*-stems, but there -*w*- seems always to be restored.¹

- (3) If */w/ was vocalized to */u/, cf. (1) above, then it should always have been apocopated after a long vowel or diphthong, producing such nom.acc.sg. forms as PGmc **snaiwaz* > **snaiu* > *snā* ‘snow’, **dauwaz* > **dēau* > **dēa* ‘dew’. In OE, *w*-less forms are practically absent, note CollGl 12.83 *sēa*, MtGl(Li) 17.2, 28.3 *snā*. The nom.acc.pl.neut. should show the same development, but no such forms of the relevant nouns are recorded.²
- (4) If */w/ was vocalized to */u/, cf. above, and the immediately preceding vowel was short, then in WGmc diphthongization occurred, hence nom.acc.sg. forms such as WGmc **strawaz* > **strau* > **strēa* ‘straw’, and nom.acc.pl.neut. forms like **cnewō* > **cnewu* > **cneu* > *cnēo*. In OE, *strēa* is restricted to the compound *strēaberige* ‘strawberry’, whilst the type *cnēo* occurs sporadically (not in Ælfric) alongside usual *cnēow*. In the rest of the paradigm the short vowel would remain and perhaps break before /w/, see Hogg (1992b:§5.22), but cf. §3.45n2 in the present volume.

¹ Angl forms such as *cnēum* ‘knees’ dat.pl. are possible exceptions, but they should perhaps be handled differently, see §3.47 for further discussion.

² On words in which the root vowel was */i:/, e.g. *brīw* ‘porridge’, see Hogg (1992b: §§4.9(2)) and §3.44 in the present volume.

2.32 The variety of changes described in §2.31 predict the following paradigm for neuter *cnēo* ‘knee’, from which the paradigms of the other types may be deduced:

	Singular	Plural
<i>Nom.</i>	<i>cnēo knee</i>	<i>cnēo</i>
<i>Acc.</i>	<i>cnēo</i>	<i>cnēo</i>
<i>Gen.</i>	<i>cneowes</i>	<i>cneowe</i>
<i>Dat.</i>	<i>cneowe</i>	<i>cnēom</i>

Although all the above forms are recorded, especially in Angl texts, there is considerable levelling of the variations in the OE period, and this type of paradigm is not typical of either EWS or, especially, LWS, see further §§3.45ff. Rather, more commonly *w* from the inflected cases was levelled into the uninflected ones, and the long diphthong of the uninflected cases was extended to the inflected ones, resulting in a uniform stem *cnēow(-)* throughout the paradigm, as indicated for *þēow* in §2.27. These analogical changes are more thoroughgoing in some words than in others. For example, *cnēo* occurs several times, almost always in poetry or in Angl texts, whilst *þēo* (instead of *þēow*) is rare, see §3.46n1.¹ In poetry of all dates, the metre often indicates that the analogical lengthening of diphthongs in inflected cases has not yet taken place; only in the relatively late Met and Jud are there also undeniable signs of lengthening, see Fulk (1992: §§162–9).

¹ But certainly in Beo there are many examples of names in *-þeo* (*Ecg-*, *Ongen-*, *Wealb-þeo*), see Fulk, Bjork and Niles (2009: 327–8).

2.33 There are few spellings in early texts which reflect earlier forms of the inflexions, but note gen.sg. ErfGl 645 *bēowaes* ‘barley’; dat.sg. Bede(M) †*baruæ* ‘grove’ as second constituent of a place-name (4×);¹ instr.sg. EpGl, ErfGl 769, 944 *smerwi* ‘fat’.² Early texts also show a number of examples in which levelling of an allomorphic variation has not taken place. Hence we find EpGl, ErfGl 1078 *smeru-*, *teru* ‘tar’ nom.acc.sg. (3×),³ LorGl 1.22 *smerum* dat.pl.⁴ CorpGl 88 *sarwo* for *searu* shows extension of *-w-* from inflected forms.

¹ The root vowel is most probably due to Nbr retraction in place of breaking, see Hogg (1992b: §5.29), although it could also be a variant under low stress, see *ibid.*: §6.7.

² The absence of breaking here may be due to the influence of nom.sg. *smeru* (Campbell, 1977: §582, see also Hogg 1992b: §5.22n6).

³ The absence of back umlaut in *smeru-*, *teru* is almost certainly chronological, see Hogg (1992b: §§5.104(2), 5.105(2)).

⁴ This form also shows the most typically Angl failure to reintroduce *w-*, cf. §2.31&cn1.

2 *ō-stem nouns*

2.34 All nouns belonging to this class are feminine. As with the *a*-stems, see §2.10, there are two sub-types in the class of *ō*-stems, namely *jō*- and *wō*-stems, formed in a manner comparable to *ja-*, *wa*-stems. The simple *ō*-stems are discussed in §§2.35–44, the *jō*-stems in §§2.45–51, and the *wō*-stems in §2.52–4.

(a) *Simple ō-stems*

2.35 In Early West Saxon, *ō*-stems typically were declined according to the following paradigms:

	Light	Heavy
Singular		
<i>Nom.</i>	ġiefu <i>gift</i>	lār ¹ <i>learning</i>
<i>Acc.</i>	ġiefe	lāre
<i>Gen.</i>	ġiefe	lāre
<i>Dat.</i>	ġiefe	lāre
Plural		
<i>Nom.</i>	ġiefa	lāra
<i>Acc.</i>	ġiefa	lāra
<i>Gen.</i>	ġiefa	lāra
<i>Dat.</i>	ġiefum	lārum

As may be seen, the only consistent difference between light- and heavy-stemmed nouns of this class is in the nom.sg., see further §2.40. On a further distinction in the gen.pl. which occurs primarily in poetry, where light stems adopt the gen.pl. inflexion *-ena* from the *n*-stems more frequently than do heavy stems, see §3.75.

¹ Wissman (1975: 50) counts this among the deverbative nouns.

2.36 This class has too large a membership to permit a listing of the relevant nouns, but amongst the 100 most frequent lexemes, see §2.7, the following inherited *ō*-stems occur:

bōt ‘remedy’, *hǣlu* ‘health’,¹ *hīd* ‘hide (of land)’, *lār* ‘learning’, *rōd* ‘cross’, *sāwol* ‘soul’, *þēod* ‘nation’.

Additional examples include:

- (a) light: *andswaru* ‘answer’, *caru* ‘sorrow’,² *cwalu* ‘death’, *faru* ‘journey’, *giefu* ‘gift’, *nafu* ‘nave’, *racu* ‘narrative’, *sacu* ‘strife’, *sc(e)amu* ‘shame’, *scōlu* ‘school’, *talū* ‘tale’, *wracu* ‘pain’, and others;
- (b) heavy: *feoht* ‘fight’, *fōr* ‘journey’, *gād* ‘goad’, *glōf* ‘glove’, *heall* ‘hall’, *lād* ‘way’, *lāf* ‘remainder’, *meord* ‘reward’,³ *sorg* ‘sorrow’, *stund* ‘period of time’, *weard* ‘protection’, *wund* ‘wound’ and many others.
- (c) disyllabic: *byden* ‘barrel’, *feter* ‘fetter’, *lygen* ‘lie’, *netel* ‘nettle’, *spinel* ‘spindle’, all with vowel plus sonorant,⁴ and *cyfes* ‘concubine’, *duguhþ* ‘virtue’, *efes* ‘eaves’, *geoguhþ* ‘youth’, *ides* ‘woman’,⁵ all with light first syllable and unscopated vowel in the second syllable.⁶ Many disyllabic forms with a stem ending in a sonorant were originally monosyllabic, the sonorant having become syllabic upon the loss of **-u* in the nom.sg. after the heavy syllable, e.g. **feþru* > **feþr* > *feþer* ‘wing’, see Hogg (1992b: §§6.34–41). Subsequently the syllabic sonorant could be extended analogically to the inflected cases, e.g. gen.pl. *feþera* beside *feþra*. There is great variability in the orthography as to whether such forms are written unambiguously as disyllabic. For example, *frōfr* ‘comfort’ is an unusual spelling, found almost exclusively in related Psalter glosses, whilst *ād* ‘disease’ and *nādl* are almost never written with a vowel before *l*.⁷ Examples of (often or intermittently) disyllabic stems that were originally monosyllabic are: (i) *ād* ‘disease’, *ceaster* ‘city’, *feþer* ‘wing’, *frōfor* ‘comfort’, *lifer* ‘liver’,⁸ *nādl* ‘needle’, *stefn* ‘voice’, *sweġer* ‘mother-in-law’, *wōcor* ‘increase’. Because these stems were originally monosyllabic and heavy, they correctly show loss of *-u* in the nom.sg. Conversely, disyllabic forms could become monosyllabic as a result of syncope, presumably originating in inflected forms. Thus:

(ii) *cyln* beside *cylen* ‘kiln’, *firn* beside *firen* ‘transgression’, *meolc* beside *meoluc* ‘milk’, and always *eln* ‘ell’.⁹ Because these stems originally comprised a light syllable followed by another, they correctly lack *-u* in the nom.sg.¹⁰ There appears to have survived just one comparable fem. noun with a heavy initial syllable, *sāwol*, *sāwl* ‘soul’, and it is difficult to explain.^{11,12}

¹ Originally a fem. *in*-stem, see §2.37n4.

² On this form and the alternative form *cearu*, see Hogg (1992b: §5.37(3)).

³ But probably not *reord* ‘food’, *reord* ‘voice’, which usually show *i*-umlaut, and hence must be *jō*-stems. On these forms, and also *briord*, *breard* ‘point’, the latter of which appears to be a variant *ō*-stem, see Hogg (1992b: §3.21).

⁴ And thus like *cyln*, etc., see immediately below. For further discussion, see Hogg (1992b: §6.68).

⁵ Of these examples, *dugub*, *geogub* and *ides* were *i*-stems in PGmc, but all had transferred to this stem class by the OE period.

⁶ But in WS *æx* ‘axe’ (< **acas-*), where the medial **a* was followed by an obstruent, that vowel is always syncopated.

⁷ However, *ād̄l* must be scanned as a disyllable at GuthB 978, 1064. Across noun classes, to judge by orthography alone, the sonorants are not syllabified with equal consistency: *r* is almost always syllabified, *n*, *l* and *m* less frequently. Metrical treatment, however, indicates that syllabic *r*, though always written <or> or <er> in verse, is sometimes non-syllabic, whilst *l* and *m* usually are, see Sievers (1893a: §79.4), Fulk (1992: §85). The claim of Peinovich (1979: 106) that forms like *ād̄l* are always disyllabic, no matter the spelling, is thus untenable. To speakers of English it may appear that monosyllabic forms like **wōkr* and *tācn* are an impossibility if the final sonorant is voiced. However, syllabicity is not a matter of physiological facts but of native speakers’ perceptions. If a language has no sound [ə] and no syllabic sonorants in other positions (Modern Icelandic is such a language), a native speaker will perceive **wōkr* and *tācn* as monosyllables.

⁸ This derives from **libar-ō*, but medial **a* would have been syncopated early, see Hogg (1992b: §6.14), producing a monosyllabic stem.

⁹ For further discussion, see Hogg (1992b: §6.68).

¹⁰ ClG 1.2788 *eġenu* ‘chaff’ is an exception, which may be due to the influence of the alternative gloss *scealu* ‘husk’ or even the Latin. In any case, it is not significant.

¹¹ We should expect that PGmc **saiwalō* would lose medial **-a-*, see Hogg (1992b: §6.14), and then, after *-ō > -u*, it would be apocopated, see *ibid.*: §6.22. The metrical evidence, however, cannot be reconciled with the assumption that *sāwol* and *sāwel* are late developments for earlier *sāwl*. They must reflect Pre-OE restoration of the medial vowel, or uncharacteristically early syllabification of final *-l*, see Fulk (1992: §98), and see further §3.104n3.

¹² It is difficult to assess the significance of a number of examples of proper names of the type LVD 29 †*Aebbino*, since they could easily be fossilized forms. The same type occurs even after heavy monosyllables in names such as LVD 45 †*Bettu*.

2.37 There are two major processes of suffixation associated with *ō*-stems. The first of these, which is exceptionally frequent, pertains to the deverbal suffix *-ung/-ing*.¹ Typical examples are: *ascung* ‘asking’, *bodung* ‘preaching’, *cost(n)ung* ‘temptation’, *cȳping* ‘trading’, *lēasung* ‘falsehood’, *ġemēting*

‘meeting’, *scotung* ‘shooting’, *wunung* ‘dwelling’. The second type of suffixation, also frequent, is with the de-adjectival suffix **-iþō*, which forms abstract nouns. In such forms final **-u < *-ō* would have remained after syncope of *-i-*, according to Hogg (1992b: §§6.22, 25), but, to the contrary, it is regularly lost in Ælfric and frequently lost even in EWS, see further §3.98. Rather, it appears that **-iþu* should have remained after a heavy syllable and been reduced to **-iþ* after a light, in accordance with the findings presented in §§3.64, 70. However, after a heavy syllable, **i* should have been syncopated in all cases but the nom.sg., and the syncopated form of the suffix was apparently extended to the nom.sg. at an early date. If the first syllable of these nouns was originally light, syncope should not have occurred, see Hogg (1992b: §§6.18–19). However, syncope seems to have been extended to all forms,² and hence we find *frymþ* ‘beginning’, *gesihþ* ‘vision’, *trymþ* ‘strength’, the lone, early relic of the original situation being EpGl, ErfGl *siuida* ‘siftings’ (for *sifiðan*, as at CorpGl 2 6.386). Once **i* had been eliminated after both heavy and light syllables, all such stems were heavy, and accordingly there was no obvious way to predict whether the nom.sg. should end in *-þu* or *-þ*, leading to random mixture of the two. Hence, typical examples are: *cýþþ(u)* ‘kinship’, *fýlþ* ‘filth’, *myrþþ* ‘mirth’, *ofermettu* ‘pride’,³ *gesæþþ* ‘happiness’, *strengþ(u)* ‘strength’, *yrþþ(u)* ‘misery’, and many nouns with the adjectival suffix *-leas* followed by the reflex of PGmc **-iþō*, with consequent assimilation, as in n2 and Hogg (1992b: §7.92), hence *lārleas* ‘ignorance’, etc.^{4,5}

¹ This may be regarded as a single suffix, see Kastovsky (1992: 388). Broadly speaking, *-ung* is associated with words derived from weak verbs of class II, whilst *-ing* is associated with the other deverbal derivations. There is variation and fluctuation, however, see Weyhe (1911: 14–49) for details.

² It might be more appropriate to see this as a restructuring of the suffix, see §3.98n1.

³ In this and other nouns with a stem-final dental there is assimilation of the fricative to a stop, see Hogg (1992b: §7.92).

⁴ For an extensive list of nouns formed this way, see Čermák (2002: 23–5).

⁵ A further group of nouns which have by the OE period become associated with this stem class are abstract nouns originally of the Gmc *in*-class, such as *menigeo* ‘multitude’. See §§2.88–90 for details and discussion.

2.38 The inflexion of the *ō*-stem nouns in early PGmc may be exemplified by a reconstructed paradigm of the following type, the etymon of EWS *ġiefu* ‘gift’, compare §2.9:¹

	Singular	Plural
Nom.	*zēþō	*zēþōoz
Acc.	*zēþōm ²	*zēþōz ³
Gen.	*zēþōoz	*zēþōom ²
Dat.	*zēþāai	*zēþōmiz

For details of the origin of these forms and their development in early Gmc, see Bammesberger (1990a: 100ff.), and cf. Kortlandt (2005).

¹ The quality of the WS stem vowel in this noun is due to palatal diphthongization of */e/, see Hogg (1992b: §5.53). In Kt and Angl, back mutation may apply, since palatal diphthongization does not.

² See §2.6n1 on the loss of *-m.

³ See here Bammesberger (1990a: 105).

2.39 The expected development of these forms would produce a prehistoric OE paradigm of the following type:

	Singular	Plural
<i>Nom.</i>	*zēbu	*zēbō
<i>Acc.</i>	*zēba	*zēba
<i>Gen.</i>	*zēbō	*zēbō̃
<i>Dat.</i>	*zēbai	*zēbum

2.40 The paradigm presented above leads in most elements directly to the paradigm presented in §2.35. Amongst regular developments it should be particularly noted that apocope of final */u/ after a heavy syllable (Hogg, 1992b: §6.20) leads to the contrast *gifu : lār*.¹ However, OE forms of the nom.acc.pl. and the gen.sg. have been subject to some re-formation. Nom.pl. -a is the expected development of *-ō, see *ibid.*: §6.28, and this is regular in EWS.² On the other hand, although the expected development of acc.pl. *-a would be -e, in EWS -a is already much more frequent than -e, see Dahl (1938: 130) for statistics. It seems most probable that this is due to syncretism of the nom. and acc.pl. endings. On the other hand, in Angl the usual inflexion for nom. and acc.pl. is -e. As suggested by Sievers (1893b), these alternative syncretisms provide an important dialect criterion.³ In the gen.sg., the predicted development would give -a, but in fact -e is the regular form. It is possible that this is due to the falling together of all the oblique cases, a process which progresses further in late texts, see §§3.76–80, and which here perhaps permits a plainer distinction between sg. and pl. forms. Alternatively and more narrowly, it may be in order to distinguish gen.sg. and gen.pl., for the latter has the regular inflexion -a. This would account for the frequent retention in EWS of -a in the gen.sg. of the abstract nouns in -ung, see §2.41 and references therein, since those nouns are not often used in the plural. This may also explain CP(H) 183.3 *iermða* ‘poverty’ gen.sg. (also PsGl(A) 39.3 *ermða*), 439.1 *ofermetta* ‘pride’ gen.sg.⁴

¹ Since the suffix -ung/-ing is heavy, apocope occurs in all forms, hence *bodung*, *lēasung*, etc. On the suffix -iþō see §2.37; on other stem types, §2.36.

² Or 107.15 *sundorsprāce* ‘private conversation’ appears to be acc.sg.

³ Flasdieck (1930b) attempts to provide a phonological account of the syncretism. Although the closeness of the phonological developments in the two cases ought not to be ignored, it seems impossible to avoid assigning a critical role to morphological forces.

⁴ Yet another view, presented in Flasdieck (1930b) and Brunner (1965: §252A1), is that the gen.sg. has taken on the inflexion of the dat.sg. This is possible, although unilluminating, and there are difficulties, see especially Dahl (1938: 133–4). And it seems unlikely that the form is borrowed from the original acc.pl. (i.e. *-e*) following feminine *n*-stems, as suggested by Campbell (1977: §586).

2.41 Nouns with the suffix *-ung/-ing*, see §2.37, form a special case, for in the sg. they frequently form the gen. in *-a*. The same inflexion is also often found in acc.dat.sg. The statistics for EWS and early texts from other dialects, presented and discussed in Dahl (1938: 141–3), show that the most frequent use of *-a* is in the acc., followed by the dat. and only then by the gen., which argues strongly against the view that *-a* was extended from the gen. to other cases (as supposed in Campbell, 1977: §589.8). Also, Dahl demonstrates that *-a* is much more frequent after *-ung* than after *-ing*, which supports his view that the variation in inflexion is due to harmonic assimilation of the unstressed vowel to the vowel of the suffix.¹

¹ One might also note that nouns of this type are infrequent in the plural, and therefore confusion between sg. and pl. was less likely, cf. §2.40.

2.42 The earliest OE texts have many spellings in <æ> reflecting the earlier form of the acc.sg., gen.sg. and dat.sg. inflexions, but such spellings do not appear in EWS texts. One example of each is: LRid 13 *aerigfaerae* ‘flight of arrows’ acc.sg., BedeH(M) †*Humbrae* ‘Humber’ gen.sg., EpGl 796 *nāēðlae* ‘needle’ dat.sg.¹ By contrast, the only clear example in early Angl except CorpGl of the later development of the nom.sg. to *-o*, *-a* is LVD29 †*Aebbino*, see, however, §2.36n12.² Outside Angl, the Kt forms Ch 1197 *Lubo*, *Lufa*, *Luba* are noteworthy.

¹ EpGl 6 *teblae* ‘die’ could be fem.nom.sg. of an *n*-stem rather than dat.sg., see Pfeifer (1974: 59).

² ErfGl 732 *scōma* ‘shame’ may be an error for *scāmo*, cf. EpGl *scāmu*, and ErfGl 912 *ruga* for *suga* ‘sow’ is untrustworthy, cf. EpGl *sugu*. CorpGl has 1393 *snoro* ‘daughter-in-law’, 1679 *scōmo* ‘shame’, and possibly 976 *scāla* ‘shell’.

2.43 There are three forms¹ which show an inflexional *-i*, namely RuthCr 56 *rōdi* ‘cross’, Rune Auzon 10 *cæstri* ‘city’, both in locative functions, and EpGl 97 *gītūngi* ‘preparation’, an instrumental. The inflexional ending, even if genuine,² cannot be original to *ō*-stems, but it is most probably borrowed from the *a*-stems, cf. §2.17, and see Bammesberger (1994), Brunner (1965: §252A1), Dahl (1938: 123), Lass (1991, 1992: 111n8).

¹ To these should be added the *jō*-stem EpGl 109 *mēgsibbi* ‘relationship’, apparently instr.sg.

² See §2.17, with further references. One might also point out that such decorative runic inscriptions as those on the Ruthwell Cross and the Auzon (Franks) Casket may be archaizing and not reflections of the immediately contemporary language.

2.44 In the nom.acc.pl. there is considerable variation between forms in *-a* and *-e*, as mentioned in §2.40, but in both instances there are <æ> spellings indicating the earlier form, e.g. LRid 5 *ueflæ* ‘woof’ nom.pl., EpGl *halbae* ‘half’ acc.pl.

(b) *jō*-stems

2.45 In EWS, *jō*-stems typically were declined according to paradigms of the following types:

	Light	Heavy
Singular		
<i>Nom.</i>	synn <i>sin</i>	gierd <i>rod</i>
<i>Acc.</i>	synne	gierde
<i>Gen.</i>	synne	gierde
<i>Dat.</i>	synne	gierde
Plural		
<i>Nom.</i>	synna	gierda
<i>Acc.</i>	synna	gierda
<i>Gen.</i>	synna	gierda
<i>Dat.</i>	synnum	gierdum

As may be observed, there is no inflexional difference between those nouns which originally had a light stem and those which originally had a heavy stem. On their historical origins, see below, §2.48.

2.46 This class has a very large membership, particularly as a result of the variety of suffixes which go to form *jō*-stem nouns, and amongst the 100 most frequent lexemes, see §2.7, the following inherited *jō*-stems occur:

bliss ‘bliss’,¹ *hell* ‘hell’, *sibb* ‘relationship’, *synn* ‘sin’, and the following words with the suffix *-ness*, see §2.47(1): *ēcness* ‘eternity’, *mildheortness* ‘mercy’, *rihtwīsness* ‘righteousness’.

Other examples of unsuffixed *jō*-stem nouns (i.e., nouns in which *-jō-* is the only suffix added to the root, at least as regards suffixes recognizable as such in PGmc) include:

- (a) original light stems: *benn* ‘wound’, *brycġ* ‘bridge’, *cricc* ‘crutch’, *eċġ* ‘edge’, *henn* ‘hen’, *nytt* ‘use’, *sæcc* ‘strife’, *seċġ* ‘sword’, *syll* ‘base’;²
- (b) original heavy stems: *bend* ‘bond’,³ *cæġ* ‘key’, *hild* ‘battle’, *hind* ‘hind’, *iġ* ‘island’,^{4,5} *liss* ‘kindness’, *milts* ‘mercy’,⁶ *rest* ‘rest’, *spræc* ‘speech’, *wylf* ‘she-wolf’, *ȝþ* ‘wave’.⁷

¹ The geminate consonant is due to an *s*-suffix of obscure origin, not WGmc gemination, and hence the noun theoretically patterns like *gyrd*, see also Hogg (1992b: §7.9&n2).

² We might add here *ewe* ‘sheep’, originally an *i*-stem, cf. Lat *ovis*, which is the regular development of PGmc **awi*, see Hogg (1992b: §5.14n1). Under reinterpretation as a *jō*-stem it is re-formed as *eowu*, with back umlaut, see *ibid.*: §5.105(1).

³ In EWS alongside masc. *i*-stem *bend*. Ælfric uses only the masc. noun. It is fem. at Beo 1936.

⁴ Here, and probably also in *cæġ*, the root was vowel-final and hence directly followed by */j/. The phonological developments are regular.

⁵ For variation in the gender of this noun, see §3.137.

⁶ For *liss*, *milts*, cf. *bliss* and n1 above.

⁷ Also to be taken here are *reord* ‘food’, *reord* ‘voice’, see §2.36n3.

2.47 As mentioned above, suffixation is a rich source of *jō*-stems. The principal suffixations are as follows:

- (1) The most frequent *jō*-stem suffix is undoubtedly the deverbal and de-adjectival, and even occasionally denominal, abstract suffix *-nes(s)*.¹ Examples additional to those cited in §2.46 are: *beorhtness* ‘brightness’, *biterness* ‘bitterness’, *clænness* ‘purity’, *wōdness* ‘madness’, all de-adjectival; *blinness* ‘cessation’, *costness* ‘temptation’, *forġifness* ‘forgiveness’, *onġitness* ‘understanding’,² all deverbal, and many others of both origins, although the former are more frequent. Denominal instances include *cwealmmess* ‘torment’, *flæscness* ‘incarnation’ and *geoguphādness* ‘youth’.
- (2) The suffix *-en(n)* has two sources: (a) WGmc **-innjō*, **-unnjō* > OE *-enn* and (b) PGmc **-īniz* > **-en*. The latter type is in origin an *īni*-stem, that is to say, a sub-group of *i*-stems, but at a very early date such nouns transferred to the *jō*-stems.³ Nouns of type (a) include feminine nouns derived from masculines, hence *fixen* ‘vixen’, *gyden* ‘goddess’, *men(n)en* ‘maidservant’, *myneċenu* ‘nun’,⁴ *scȳlcen* ‘female servant’, *þēowenn* ‘maidservant’, *þīnen* ‘maidservant’, *-wyrġenn* ‘female monster’. But some other nouns bear the suffix of type (a), as well, including *byrġenn* ‘burial’,⁵ *byrþen* ‘burden’, *hengen* ‘hanging’. Except where indicated, the nom.sg. has no final geminate consonant. Nouns of type (b) are deverbal or denominal nouns either concrete or abstract,⁶ for example *hæften* ‘captivity’, *ræden* ‘condition’,⁷ *sel(l)en* ‘gift’.
- (3) The suffix *-es(s)* is from PGmc **-isjō* and is used to form a number of feminine nouns, including: *byres* ‘chisel’, *cyfes* ‘concubine’, *forleġes* ‘prostitute’, *hæġtes* ‘witch’.⁸ *Cnēoris* ‘race’ appears to be an original

i-stem which has been reanalysed in OE as a *jō*-stem on the basis of its final syllable, see Kluge (1882: 528), also Dahl (1938: 153).⁹

- (4) The suffix *-et(t)*, from PGmc **-itjō*, **-atjō*, is found on nouns such as *ānet* ‘solitude’, *hyrnet* ‘hornet’, *lempet* ‘dish’, *ylfet* ‘dish’. But in early texts these appear with *-u* in the nom.sg., e.g. ErfGl 275 *hirnitu*, EpGl 718 *aelbitu* (= *ylfetu*), whilst ErfGl2 20 *lempite* ‘basin’ nom.pl. shows no geminate consonant, and the neut.pl. *liġetu* ‘lightning’ is reinterpreted as belonging to the same class, and with lack of gemination in inflected forms. Such early forms may be explained as early transfers to the *ō*-stems, see Brunner (1965: §258.1), or as original *ō*-stems with later forms such as *hyrnet* being taken as transfers to the *jō*-stems, see Dahl (1938: 118–19).¹⁰ Given the parallel existence of *myneċenu*, above, which is a derivation from the Lat loan *munuc*, the former of these explanations seems the more probable, see further §2.49.

¹ This is the usual form in EWS; in LWS the usual form is *-nyss*. In Angl the form is *-niss*, whilst Kt varies between *-ness* and *-niss*, the latter being absent from CollGl 49. On the etymology and development of the suffix, see Suzuki (1990). See §2.49 on degemination of the final consonant in this and other suffixes of similar structure, e.g. *-nes*, *-nys*, *-en*, etc., and §3.91(1)&n3 on nom.sg. *-nesse*, etc.

² Alongside *forġifness*, *onġitness* we find *forġifeness*, *onġitenness*, the former from the inf., the latter from the pa.part. On such doublets, see Suzuki (1990) and Kastovsky (1992: 387–8).

³ This suffix does not, however, always produce *jō*-stems, and some of the examples given below may also be neut., for example *byrġen*, and others are never fem. In this context note especially *dryhten* ‘lord’, *þēoden* ‘prince’, which are masc. *a*-stems in OE, and the neut. *a*-stem *nȳten* ‘animal’. On the *jō*-stems, see Dahl (1938: 152–3) and Bammesberger (1990a: 148).

⁴ For example at ÆCHom II 2 106.499. For discussion of the retention of inflexional *-u*, see (4) below. Some other words of this type show the same phenomenon, thus *gydenu* ‘goddess’, *mennenu* ‘maidservant’.

⁵ Kluge (1926: §149(b)) regards *byrġen* as belonging to type (b), but this leaves the geminate *-mm-* usually found in inflected forms unexplained.

⁶ See Kastovsky (1992: 385), against the common view that all these derivatives are abstract.

⁷ Cf. Got *garaideins* ‘regulation’. Rare examples of inflected *rādenne* are perhaps due to confusion with the suffix seen in nouns like *campræden* ‘war’, *hīwræden* ‘family’, *manræden* ‘homage’, all probably with WGmc **-innjō*, on which see Fulk, Bjork and Niles (2009: 189), with references.

⁸ *Lynis* ‘linchpin’, nom.pl. *lynisas*, is of the same origin, but it has the inflexions of the *a*-stems. *Ides* ‘woman’ came to be inflected like these nouns, but it is of different origin (cf. OHG *itins*), having been originally an *i*-stem.

⁹ But Nbr *cnēoresu*, etc. is a *wō*-stem, see §3.93n4 and further references therein for fuller details.

¹⁰ These nouns often transfer to the *n*-stems in later OE, see §3.102n2.

2.48 The inflexions of originally light *jō*-stem nouns can be traced back to PGmc inflexions which parallel those of the simple *ō*-stems but with **/j/*

preceding the inflexional vowel. This */j/ would have been */ij/ after a heavy syllable, cf. the discussion of *ja*-stems in §2.22. Hence we can reconstruct the following early PGmc paradigms:

	Light	Heavy
Singular		
<i>Nom.</i>	*sunjō	*ʒardijō
<i>Acc.</i>	*sunjōm	*ʒardijōm
<i>Gen.</i>	*sunjōoz	*ʒardijōoz
<i>Dat.</i>	*sunjāai	*ʒardijāai
Plural		
<i>Nom.</i>	*sunjōoz	*ʒardijōoz
<i>Acc.</i>	*sunjōz	*ʒardijōz
<i>Gen.</i>	*sunjōom	*ʒardijōom
<i>Dat.</i>	*sunjōmiz	*ʒardijōmiz

2.49 All *jō*-stems should show the same developments as heavy *ō*-stems, including the types of variation discussed in §2.40. But additionally, in the original light stems there is gemination of all final consonants except */t/. The zero inflexion in the nom.sg. is due to apocope of final *-u* after a heavy syllable whether due to gemination, as with *synn*, or original, as in *gierd*.¹ However, suffixed nouns frequently show degemination in the unstressed suffix. Such degemination occurs earlier than in stressed positions, see Hogg (1992b: §7.80), and it could be extended to medial position in inflected cases. Thus, in CP we typically find examples such as *sōðfæstnes* ‘truth’, *byrðen* ‘burden’, alongside much less frequent *sōðfæstness*.^{2,3} If degemination were early, the types exemplified by *hirnitu*, *mynečenu*, etc. (§2.47), might then have been reinterpreted as *ō*-stems and hence might have invited reintroduction of inflexional *-u* in the nom.sg.

¹ As suggested by Dahl (1938: §148), EpGl, ErfGl 440, CorpGl 922 *aetgāeru* ‘javelin’ is the predicted nom.sg. from PGmc **atgairijō*, cf. *ja*-stems such as *witu*, §2.24.

² See further Cosijn (1886: §18). Cosijn gives no EWS instances of *enn*-suffixes with gemination in nom.sg., and, for example, there are no examples anywhere of *(-)*byrþenn* in the DOEC.

³ In the instance of the suffix *-ness*, at least, Ælfric, by contrast, appears to have free variation between geminated (*-nyss*) and ungeminated (*-nys*) forms.

2.50 There are few spellings in early texts which reflect particularly archaic forms, but note EpGl 109 *mēgsibbi* instr.sg., and see §2.43. To this might be added the highly suspect LdGl *tynd(e)ri* ‘tinder’ (? = *tyndrin*, cf. ErfGl 555a, CorpGl 1156).

2.51 Historically, the light *jō*-stems can be distinguished from the *ō*-stems by the presence of gemination and *i*-umlaut (where possible), whilst the heavy *jō*-stems are distinguished only by *i*-umlaut (where possible).

(c) *wō*-stems

2.52 In EWS, *wō*-stems typically were declined according to paradigms of the following types:

	Light	Heavy
Singular		
<i>Nom.</i>	<i>sinu sinew</i>	<i>læs pasture</i>
<i>Acc.</i>	<i>sinwe</i>	<i>læswe</i>
<i>Gen.</i>	<i>sinwe</i>	<i>læswe</i>
<i>Dat.</i>	<i>sinwe</i>	<i>læswe</i>
Plural		
<i>Nom.</i>	<i>sinwa</i>	<i>læswa</i>
<i>Acc.</i>	<i>sinwa</i>	<i>læswa</i>
<i>Gen.</i>	<i>sinwa</i>	<i>læswa</i>
<i>Dat.</i>	<i>sinwum</i>	<i>læssum</i>

As with *wa*-stems, see §2.27, there are a number of nouns in which *-w-* was directly preceded by a vowel or diphthong. In EWS such nouns typically have a paradigm that resembles nom.sg. *stōw* ‘place’, acc.sg. *stōwe*, but see §2.54 for further discussion.

2.53 There are relatively few nouns which belong to this declension, but light stems like *sinu* include *beadu* ‘battle’, *nearu* ‘difficulty’, *sceadu* (beside neut. *scead*) ‘shade’,¹ and the pluralia tantum *frætwe* ‘ornaments’, *geatwe* ‘armour’; heavy stems like *læs* include *blōd(e)læs* ‘blood-letting’, *mæd* ‘meadow’ and Az 126 *ræssum* ‘council’ dat.pl.

¹ Occasionally *searu* ‘device’, usually a *wa*-stem, occurs as a fem., cf. §2.27, although some of the apparently fem. examples could be taken as masc., see §3.9n5.

2.54 Except for nouns such as *stōw*, the paradigm of this sub-class closely follows that of the *ō*-stems and is otherwise phonologically predictable except for the dat.pl., where *-w-* has been analogically restored, cf. §2.31(2).¹ In *stōw*, /w/ should have been lost finally, and before /u/, to give nom.sg. **stō*, dat.pl. **stōm* < **stō-um*. But in both instances *-w-* is regularly restored, perhaps orthographically in the nom.sg., see Hogg (1992b: §§7.72–3). Nouns of the same type include *hrēow* ‘penitence’, *trēow* ‘faith’. Where the root vowel was originally **a*, the phonological development should

have been to a nom.sg. like **clēa* ‘claw’, *þrēa* ‘affliction’, with forms of the type *claw-*, *þraw-* in the other cases. But in early texts we find EpGl, ErfGl 29, CorpGl 211 *clauuo*, EpGl 53 *thrauu*, CorpGl 200 *thrauuuo*, which show re-formation of the nom.sg. on the analogy of the inflected cases. Yet later examples of the type *clēa* nom.pl. suggest that the unattested nom.sg. must have existed, see further §3.94.

¹ For early examples of the usually later type in which *-w-* is lost before any inflexion, see §3.93. LRid 10 *geatum*, a dat.pl. used adverbially meaning ‘with splendour’, is certainly no early form, as the poetic metre demands a word with a heavy initial syllable. See §3.93 also for a discussion of forms in which an epenthetic vowel is introduced before *-w-*, e.g. *beaduwe* ‘battle’ dat.sg.

3 *i-stem nouns*

2.55 Nouns belonging to the class of *i*-stems could be of all three genders, although in PGmc, neuters were much less frequent than the others.¹ Originally, masc. and fem. nouns were declined identically. However, the evidence of Gothic, for example, shows that in PGmc the masc. *i*-stems had already adopted the inflexions of the masc. *a*-stems in the singular, and the evidence of OE (which differs from that of Gothic, however, in regard to the singular) shows that this process had begun to be extended to the plural by the earliest times. Similarly, the OE fem. *i*-stems adopted at a very early date the inflexions of the *ō*-stems, and the neuters adopted the inflexions of the neut. *a*-stems. The consequence of these changes is that for the majority of *i*-stems, even in eOE, their membership in that stem class is primarily an historical fact rather than an indication of their structure in OE.² For discussion of the distinguishing characteristics of *i*-stems, see below, §2.69, and for their status within the OE period see §§3.32–3, 10.41, 10.77.

¹ Thus, there are no apparent examples of neuter *i*-stems in Gothic.

² On the elimination of the *i*-stems as a discrete declensional category, see Hogg (1992c), Adamczyk (2008).

2.56 In EWS, masc. *i*-stems typically were declined according to the following paradigms:

	Light	Heavy
Singular		
<i>Nom.</i>	wine <i>friend</i>	dǣl <i>part</i>
<i>Acc.</i>	wine	dǣl
<i>Gen.</i>	wines	dǣles
<i>Dat.</i>	wine	dǣle

Plural

<i>Nom.</i>	winas ¹	dǣlas
<i>Acc.</i>	winas	dǣlas
<i>Gen.</i>	wina ²	dǣla
<i>Dat.</i>	winum	dǣlum

The only clear-cut distinction between light and heavy stems is found in the nom.acc.sg., where *-e* is found only in the light stems.³ The loss of **-iz* in the heavy stems was the cause of their more thorough assimilation into the category of *a*-stems. For the occasional distinction between light and heavy stems in the gen.pl., see §2.61n1.

¹ Except for names of ethnicities and other pluralia tantum, which form a special case, see §2.70, there are very few examples of the historically expected *-e* in the nom.acc.pl. The claim of Sprockel (1965: 170) that *-e* is the regular nom.acc.pl. inflexion in ChronA must be read in this light. See further §2.62.

² For poetical *wini(ge)a*, see §2.61n1.

³ See §3.33 for discussion of whether or not this *-e* should be analysed synchronically as an inflexion.

2.57 This quite large class contains a few nouns of high frequency, and amongst the 100 most frequent lexemes, see §2.7, the following masc. *i*-stems occur:¹ (a) light: *mete* ‘food’; (b) heavy: *dǣl* ‘part’, *sǣ* ‘sea’.²

Additional examples include:

- (a) light: *bere* ‘barley’, *bite* ‘bite’, *blice* ‘brightness’, *bryce* ‘breach’, *bryce* ‘use’, *bryne* ‘burning’, *byge* ‘bending’, *byre* ‘youth’, *cwide* ‘speech’, *cyle* ‘cold’, *cyme* ‘arrival’, *cyre* ‘choice’, *dile* ‘dill’ (cf. §2.25n4), *drepe* ‘slaying’, *dryre* ‘decline’, *dyne* ‘din’, *ece* ‘pain’, *ege* ‘terror’, *ele* ‘oil’, *flyge* ‘flight’, *gripe* ‘grip’, *gryre* ‘terror’, *gyte* ‘flood’, *hefe* ‘weight’, *hege* ‘hedge’, *hete* ‘hate’, *hrine* ‘touch’, *hryre* ‘fall’, *hyge* ‘mind’, *hype* ‘hip’, *hyse* ‘young man’, *ile* ‘sole’, *lyge* ‘lie’, *lyre* ‘loss’, *mere* ‘lake’, *myne* ‘mind’, *myne* ‘necklace’, *(fore-)nyme* ‘taking’, *pyle* ‘pillow’, *ryge* ‘rye’, *ryne* ‘course’, *scriðe* ‘journey’, *scyfe* ‘pushing’, *scyte* ‘shooting’, *sele* ‘hall’, *sice* ‘sigh’, *sige* ‘victory’, *slege* ‘blow’, *slide* ‘slip’, *snide* ‘cut’, *spiwe* ‘vomiting’, *stæpe* ‘step’,³ *stede* (occ. Nbr. *styde*) ‘place’, *stice* ‘prick’, *stige* ‘rise’, *stride* ‘stride’, *swice* ‘smell’, *swyle* ‘swelling’, *sype* ‘suction’, *tige* ‘tug’, *þyle* ‘orator’, *wlite* ‘beauty’.⁴
- (b) heavy: *æf(e)st* ‘envy’, *ǣrist* ‘resurrection’, *bend* ‘bond’ (cf. §2.46n3), *byht* ‘bend’, *brǣw* ‘eyelid’, *bylg* ‘bag’,⁵ *byrst* ‘loss’, *cyrm* ‘shouting’, *cyrr* ‘turn’, *dem* ‘damage’,⁶ *drenc* ‘drink’, *ent* ‘giant’, *feng* ‘grasp’, *fyll* ‘fall’, *fyr* ‘furze’, *fyrst* ‘period of time’, *glǣm* ‘brightness’, *gylt* ‘guilt’, *gyst* ‘guest’, *hyll* ‘hill’,⁷ *lig* ‘flame’, *lyft* ‘sky’,⁸ *mǣw* ‘mew’, *pliht* ‘danger’, *sǣl* ‘time’.⁹

sprynġ ‘source’, *stenċ* ‘smell’, *steng* ‘pole’, *streng* ‘string’, *styll* ‘leap’, *swēg* ‘noise’, *sweng* ‘blow’, *swylt* ‘death’, *tyht* ‘manner’, *þyrs* ‘giant’, *wæg* ‘movement’, *wrenċ* ‘trick’, *wyll* ‘well’, *wyrm* ‘serpent’, *wyrp* ‘throw’.

¹ Not all the nouns listed in this paragraph are in origin *i*-stems, but their historical development shows that they were members of this class in PGmc. A number of the nouns cited here undergo divergent developments during OE, e.g. *mete* > *mett*. For discussion of this, see §3.41.

² Also fem., see §3.135. Masc. usage is usually Angl and poetic, but see Fulk, Bjork and Niles (2009: 244) for references.

³ The usual form alongside the less frequent but predicted form *stepe*. *Stæpe* may be due to umlaut of analogically restored /a/, cf. nom.pl. *stapas* without *i*-umlaut (attributable, presumably, to an early transfer to the *a*-stem class), or it may simply show a re-formation of the noun parallel to the alternation *dæg* ~ *dagas* ‘day ~ days’, see further §3.15.

⁴ To these might be added the loan *drȳ* ‘magician’ (from Old Irish *druí*), although it follows the paradigm of the *a*-stems. The inflected stem has a short vowel, as indicated by the poetic metre at Jul 301.

⁵ For forms such as Ru1 *belgas* ‘wine-skins’, see Hogg (1992b: §5.79(2)a).

⁶ But this, of unknown origin, could be a *ja*-stem.

⁷ Nom.sg. **hyle* does not occur, and ungeminated forms are found only in late charters, suggesting that the word had been transferred to the *ja*-stems at a very early stage, see also §3.39. For *hyll* as a heavy *i*-stem, cf. Lat. *collis*. For the variable gender of *hyll*, see §3.135.

⁸ But *lyft* is found in all three genders.

⁹ Rarely fem., as at GenA 1184 *seo sæl*.

2.58 The frequent suffix *-scīpe* is an important source of masc. *i*-stems, including examples such as: (*ġe-*)*bēorscīpe* ‘feast’, *frēondscīpe* ‘friendship’, (*ġe-*)*fērscīpe* ‘fellowship’, *hǣðenscīpe* ‘paganism’, *lēodscīpe* ‘nation’, *weorðscīpe* ‘worship’.

2.59 The paradigm of *wine* can be traced back to the early PGmc paradigm type presented below (with the gen.pl. of the heavy-stemmed etymon of OE *dǣla* supplied for comparison with that of light-stemmed *wina*). In order to clarify the historical developments, those parts of the paradigm which are not reflected as such in EWS, where *a*-stem inflexions have been adopted instead, are italicized:

	Singular	Plural
<i>Nom.</i>	*weniz	*wenejez ¹
<i>Acc.</i>	*wenim	*weninz
<i>Gen.</i>	*weneiz	*wenijōom ² (*dailijōom)
<i>Dat.</i>	*wenai ³	*wenimiz

¹ In very early texts there are a few forms with *-i*, *-e*, e.g. CorpGl 1510 *stridi* ‘strides’. This is the regular development of the PGmc **-ejez* > **-īz* with trimoric vowel, which

would perhaps have been bimoric at the time of apocope and therefore would possibly have remained even after heavy syllables, e.g. CorpGl 548 *dāēle*, see further §2.62. But there are many uncertainties: see Bliss (1967: 113–17), Fulk (1992: 421–2).

² The PIE ending was **i(y)ōm*, with syllabic **i*, cf. Homeric Greek gen.pl. *πολίῳν* ‘cities’, Lat *marium* ‘seas’, etc. See further §2.61n2. Some scholars assume that the trimoric gen.pl. ending arose only in the *a*- and *ō*-stems, or perhaps only in the latter. In that event, it must be assumed that in Gmc the trimoric variant was extended to the *i*-stems, *u*-stems and consonantal stems. Preservation of the distinction after the PGmc period might explain why *manno* occurs beside *manno*, the latter with the usual gen.pl. inflexion, as the gen.pl. of OSax *man* ‘person’.

³ This dat. form is locative in origin, see Bammesberger (1990a: 126), if it is not borrowed from the *a*-stem dat. The parallel of the dat.sg. of *u*-stems, see §2.74, suggests the ending here is locative. See §2.62 on the possible retention in early texts of the original dat. ending.

2.60 The phonological development of the forms cited above would result in a Pre-OE paradigm of the following type, except that the italicized forms are now replacements based on *a*-stem inflexional patterns, cf. §2.14:¹

	Singular	Plural
<i>Nom.</i>	*wini	*winōs
<i>Acc.</i>	*wini	*winōs
<i>Gen.</i>	*winas	*winijō̃ (*dailijō̃)
<i>Dat.</i>	*winai	*winum

In all forms in which the inflexion is from the *a*-stems we should not expect the stem vowel to have been raised, see Hogg (1992b: §3.6). Although it is difficult to determine when the inflexions of the *a*-stems were adopted, it is likely that the process was not complete until near the beginning of the historical period, and therefore the root vowel of, say, **winas* is likely to be phonological in origin.

¹ On the reasons for the substitution of *a*-stem inflexions, see Bertacca (2001).

2.61 In EWS, the nom.acc.sg. presents a genuine *i*-stem inflexion which develops directly into EWS, the only variation in form being between light stems such as *wine* and heavy stems with apocope of earlier **i*, e.g. *dāēl*. The gen.pl. of heavy stems is regular: compare with *dāēla* a *ja*-stem gen.pl. such as *enda*. But in light stems the gen.pl. ending **-ijō̃* in the prose of all dialects has been replaced by the **-ō̃* found in the *a*-stems. It is only in poetry that gen. pl. *wini(ge)a* occurs,¹ reflecting the original Gmc form.² Aside from these few exceptions and, probably, the dat.sg., the inflexions of *i*-stems are all taken over from the *a*-stems.³

¹ Gen.pl. *winiġa* occurs at GuthB 1365 (with confusion of minims: the manuscript has <wiinga> altered from <wimga>), and *winia* appears at Beo 2567, beside two

instances of *-wina* in the poem. Also in Beo, *Deni(ge)a* ‘Danes’ occurs (14×) beside (-) *Dena* (15×). With just one exception, *Deniġa* could be substituted for all instances of *Dena* without detriment to the metre, whilst the substitution of *Dena* for *Deniġa* would disrupt the scansion in every instance, see Fulk (1992: 243–5).

² Bammesberger (1990a: 127) maintains that PGmc **-ijōō* would have been reduced to **-jōō* after a light syllable, causing gemination in light stems, with subsequent analogical restoration of the non-geminate. However, the basis for this view, the so-called converse of Sievers’s Law, is not now generally credited, see Collinge (1985: 159–74), Fulk (1986: 12–13) and Barrack (1998: 247n.12) for references. Cf. the discussion of these forms by Adamczyk (2001).

³ It is sometimes suggested that Ch 31.8 †*Folcuuinis* pers. name (gen.sg.) may have *-s* of the *a*-stem inflexion attached to *-i-*, marker of the *i*-stem class, thus Dahl (1938: 161), Campbell (1977: §601n1), but this is less likely than that the form merely shows confusion between unstressed vowels, see Bazell (1960: 29) and, for discussion of another possible variant, §2.68. But infrequent examples of *-e* for acc.pl. are regularly developed from PGmc **-inz* > **-īz*. See also §2.59n1.

2.62 The earliest OE texts evince a variety of spellings which reflect earlier forms of the inflexions or of inflexions originally proper to *i*-stems but which have usually been superseded by *a*-stem inflexions. For the nom.acc.sg. there are a great many examples of *-i*, almost all of which are in names with the second element *-wini*, e.g. *Aelfuini*, *Ōsuini*, etc.¹ Examples not from name elements include EpGl, ErfGl 962 *meri* ‘lake’, 918 *ryġi* ‘rye’,² CorpGl 664 *cyri* ‘choice’. There are no significant early forms of the gen. sg., for the frequent *-wini* in Nbr names is a Latinism, and †*Folcuuinis* is unreliable, see §2.61n2, whilst Bede 2 *Ēadwinis* is late, see Dahl (1938: 161&n) for this and for Latinisms. There are a few dat.sg. forms in *-i*, thus EpGl, ErfGl 731, CorpGl 1471 *dāēli*, Inscr 55,³ RuneThornhillA *-wini*. The first might be an instr., but this is less probable for the other examples, both governed by *æfter*. Except with names of nationalities and other pluralia tantum, for which see §2.70, there are only rare examples of nom.acc.pl. in *-i* or its later development *-e*. Examples are: CorpGl 1510 *stridi* ‘strides’, 548 *dāēle* ‘parts’ acc., and possibly PsGl(A) 134.19–20 *gehūsscipe* ‘family’.⁴ Other examples of the same inflexion are poetical, e.g. Beo 1188 *byre* ‘boys, sons’ nom.pl., 2018 acc.pl.⁵

¹ But with the name element *-siġe* Nbr almost invariably has an inflexionless form, e.g. *Aelfsiġ*. Here it may be supposed that **-iji* > *-ij*, see Girvan (1931: §178a2).

² Cf. *dile*. ErfGl 918 *ryġ* is not necessarily significant, but cf. n1 above.

³ That is, the Wycliffe Stone, see Okasha (1971: 129–30).

⁴ But we cannot help but suspect, *pace* Dahl (1938: 163), that the examples from PsGl(A) are instances of the infrequent use of a plural verb with a collective noun in the sg., see Mitchell (1985: §84), who does not cite or discuss these examples.

⁵ For variant gen.pl. forms, see §2.61n1.

2.63 Even in EWS, neut. *i*-stems followed the paradigm of the neut. *a*-stems except in the nom.acc.sg., where *-e* < **-īz* was retained. Heavy stems were

distinguished from light stems by having zero inflexion in the nom.acc.sg.&pl. due to apocope. Hence we find paradigms as follows:

	Light	Heavy
Singular		
<i>Nom.</i>	sperē <i>spear</i>	flǣsc̄ <i>flesh</i>
<i>Acc.</i>	sperē	flǣsc̄
<i>Gen.</i>	speres	flǣsc̄es
<i>Dat.</i>	sperē	flǣsc̄e
Plural		
<i>Nom.</i>	speru	flǣsc̄
<i>Acc.</i>	speru	flǣsc̄
<i>Gen.</i>	spera	flǣsca
<i>Dat.</i>	sperum	flǣscum

2.64 The number of *i*-stem neuters is relatively small, and it is not always possible to determine the stem class with certainty, in view of the scarcity of the comparative evidence, see §2.55. However, the following light stems occur: *clyne* ‘lump’, *gedyre* ‘door-post’, *ofdele* ‘slope’, *ofersleġe* ‘lintel’, *orleġe* ‘strife’, *sife* ‘sieve’.¹ The following heavy stems occur: *flȳs* ‘fleece’, *hǣl* ‘omen’, *hilt* ‘hilt’, *hrēð* ‘glory’,² and a number of derived forms with the prefix *ġe-*, e.g., *ġebenn* ‘proclamation’, *ġedwyld* ‘error’, *ġefēġ* ‘joint’, *ġegrynd* ‘plot of ground’, *ġehlyd* ‘cry’, *ġehyld* ‘guard’, *ġehmǣst* ‘clash’, *ġeswinċ* ‘labour’, *ġewēd* ‘madness’, *ġewylc̄* ‘rolling’³ and, already prefixed (and hence without *ġe-*), *ymbcȳrf* ‘circumcision’. These derived forms are always neut., but in other forms there is fluctuation between fem. and neut., see for this and also unumlauted variants §2.69.

¹ *Ġedyne* ‘noise’ may be a neut. collective alongside *dȳne* (§2.57a), but firm evidence is lacking; it is uncertain whether ClG1 1,3 *ġewife* ‘fate’ (4x) is a nom. or dat. form; *ʔ†ġewile* is unclear, cf. LawlCn 75.1 *ġewill*, which behaves as a neut. *ja*-stem. In all three cases the root vowel would suggest an original *i*-stem, but the OE evidence does not help to confirm the suggestion.

² The latter two are also masc.

³ Possibly also *ġeresp* ‘conviction’.

2.65 In EWS, heavy¹ fem. *i*-stems typically were declined according to the following paradigm:

	Singular	Plural
<i>Nom.</i>	dǣd <i>deed</i>	dǣda
<i>Acc.</i>	dǣd, dǣde	dǣda
<i>Gen.</i>	dǣde	dǣda
<i>Dat.</i>	dǣde	dǣdum

The plural forms of these nouns are wholly those of the \bar{o} -stems, and hence they show the same dialectal variations found in \bar{o} -stems, see §2.40 for details.²

¹ See §2.66 on light-stemmed fem. nouns of this class.

² But on the important variation between zero and *-e* in the acc.sg., see the discussion in §3.77.

2.66 There are very few light-stemmed fem. nouns of this class, and they can be deduced only by the *i*-umlaut of their stem vowel, since they always follow the paradigm of the light \bar{o} -stems, even in nom.sg. Safe examples of such nouns are *denu* ‘valley’ and *fremu* ‘benefit’, to which may be added **hylu* ‘hollow’ and compounds in *-legu*,¹ *-neru*, e.g. **ealdorlegu* ‘death’, **ealdorneru* ‘safety’, none of which occurs in the nom.sg.

¹ Perhaps the suffix should be *-leġu*, in view of the evidence that *i*-stem inflexions could be preserved into the historical period, see §2.68.

2.67 By contrast, there are a considerable number of heavy-stemmed fem. nouns, including several amongst the 100 most frequent lexemes:

ǣ ‘law’,¹ *dǣd* ‘deed’, *miht* ‘power’, *sǣ* ‘sea’ (also masc., see §2.57b), *tīd* ‘time’, *woruld* ‘world’ (rarely masc.), *wyrt* ‘plant’.

Other such nouns include: *ǣht* ‘property’, *bēn* ‘prayer’, *beni* ‘bench’, *brȳd* ‘bride’, *cwēn* ‘queen’, *dryht* ‘crowd’, *ēst* ‘favour’, *fȳrd* ‘army’, *fȳst* ‘fist’, *glēd* ‘coal’, *hǣst* ‘violence’, *hȳd* ‘hide’, *hȳf* ‘hive’, *hyrst* ‘ornament’, *lǣn* ‘loan’, *lyft* ‘air’ (mainly fem., but see §3.137), *nȳd* ‘need’, *scyld* ‘guilt’, *spēd* ‘success’, *þrȳð* ‘force’, *wēn* ‘hope’, *wist* ‘sustenance’, *wyrd* ‘fate’, *ȳst* ‘storm’, together with a number of derived forms with the prefix *ġe-*, e.g. *ġecynd* ‘nature’ (also frequently neuter), *ġeþyġd* ‘thought’, *ġemynd* ‘mind’, *ġesceaft* ‘creation’, *ġeþeapt* ‘thought’, *ġeþyld* ‘patience’, *ġewyrht* ‘deed’.²

¹ *ǣ* is usually uninflected except in the gen.dat.pl., where *ǣa*, *ǣwum* are found. But alongside uninflected forms, new acc.gen.dat.sg. *ǣwe* is formed, and hence analogical nom.sg. *ǣw*.

² Several fem. *i*-stems, especially abstracts, tend to transfer to neut. gender during the OE period. For discussion and exemplification, see §3.134. On lack of *i*-umlaut in some of these forms, see §2.69&n4.

2.68 There are a few forms in early texts which may represent archaic varieties of some inflexions. For the nom.acc.pl. we find CorpGl 133 *hȳfi* ‘hive’, CaedH 2 *maecti* (M), *mehti* (L). *Hȳfi* occurs alongside a number of other forms with *-e*, but EpGl 764 *uuyrdae* ‘Fates’ already shows an \bar{o} -stem inflexion, possibly alongside the difficult 605 *flēti* ‘curds’, on which see

Dahl (1938: 174–5) and the *DOE*: *fleote*³. *Maecti* lacks *i*-umlaut, whilst *mehti* has *i*-umlaut. The proper interpretation of all the above forms remains difficult. LRid 9 *uyrdi* gen.sg. is not easily explained,¹ although it appears to be genuine, see Smith (1978: 34), also Hogg (1992b: §6.53).

¹ Although *-i* here is usually derived from PIE **-eys*, a presumed ablaut variant of normal **-oys*, there is no evidence for the preservation of such an inflexion in other Gmc languages, and so this idea seems rather speculative. Therefore Campbell (1977: §605) would explain *-i* as introduced by analogy to the original acc.pl. inflexion, since he suggests a similar analogy to explain the appearance of *-e* rather than **-a* in the gen.sg. of *ō*-stems; but cf. §2.40n4 above.

2.69 The primary characteristic of *i*-stem nouns is that they show *i*-umlaut of the root vowel or the PGmc equivalent of vowel harmony, hence *dǣd*, *wine*, so distinguishing these nouns from *a*- and *ō*-stems. Additionally, light stems should not have gemination of the final consonant, e.g. *wine*, which distinguishes these nouns from light *ja*-, *jō*-stems. However, this situation is obscured by developments in late PGmc and OE. In PIE, neuter nouns of the *s*-stem class were formed with **-os* in the nom.sg. and **-es-* in the gen.sg. due to ablaut alternation, see §2.95 for discussion, and in Gmc these developed as **-az*, **-iz-*, respectively. In PGmc, the variant **-iz-* seems to have been levelled into the nom.acc.sg. from the other cases, cf. Got *riqis* ‘darkness’, etc. Consequently, *s*-stem nouns could transfer to the *i*-stem class as a result of the equation of the nom.sg. ending **-iz* in the two stem classes. Since, as is noted in §2.55&n1, neut. *i*-stems were extremely rare in PGmc, it may be that all, or almost all, such neuts originally belonged to the *s*-stems. But a consequence of transferral to the *i*-stem class is that umlauted forms may exist alongside unumlauted forms, due to the ablaut variation noted above. Hence we find *helt*, *gebann*, *gēcund*,¹ *gefōg*, *geheald*, *gebnāst*, *gewealc* beside the unumlauted forms cited in §2.64. Some other original neut. *s*-stems transfer their gender on becoming *i*-stems, hence masc. *bere*, *ege*, *hete*, *sele*, *siġe*, see §2.57a. In these cases *i*-umlaut is always present,² and their original status is determinable only comparatively, cf. Got **baris* (from which is derived *barizeins* ‘of barley’ adj.), *agis*, *hatis*, *sigis*, or by the presence of related forms in *-or* < **-az*, e.g. *salor* ‘hall’, *sigor* ‘victory’.³ A further Gmc development appears to account for the absence of *i*-umlaut in derived abstract fem. nouns in PIE **-ti-* such as *gescēaft*, *gebeaht* (§2.67), which may have been influenced in PGmc by similar *ō*-stem abstract nouns in PIE **-tā-*, e.g. OE *ōht* ‘enmity’, cf. *ōga* ‘terror’.⁴

¹ Found only at ÆHomM 1.159 *gēcunde*.

² Note, however, the *a*-stem variant of *sele*, namely neut. *sæl* ~ *salu*, without *i*-umlaut.

³ The number of these nouns is necessarily doubtful; to the above some have added *hyġe*, but this is not supported by Got *hugis* gen.sg.

⁴ See Kluge (1926: §127). As Brunner (1965: §261) remarks, these nouns are not likely to have been *s*-stems originally, even though they are also attested as neuters; and perhaps to be explained the same way is *meaht* alongside *miht*, though the stem of the verb *mæg* ‘can’ (2sg. *meaht*) may have exerted analogical influence.

2.70 Names of nationalities, which are found only in the plural, form a special subset of masc. *i*-stems, for they have nom.acc.pl. in *-e*, thus showing the predicted development of the PGmc inflexion, see §2.56&n1. They decline as follows:

<i>Nom.</i>	Engle <i>English</i>
<i>Acc.</i>	Engle
<i>Gen.</i>	Engla
<i>Dat.</i>	Englum

Typical examples of such names are: *Beornice* ‘Bernicians’, *Dene* ‘Danes’,¹ *Dēre* ‘Deirans’, *Myrce* ‘Mercians’, *Norþ(an)-*, *Sūþ(an)hymbre* ‘North-, Southumbrians’, *Seaxe* ‘Saxons’, *Ēgipte* ‘Egyptians’, *Rōmane* ‘Romans’, *Perse* ‘Persians’.² Also to be included in this type are the pluralia tantum *lēode* ‘people’,³ *ylde* ‘men’, *ylfe* ‘elves’. Suffixal *ware*, as in *burgware* ‘citizens’, *Rōmware* ‘Romans’, is a transfer into this class on the basis of the fem. *ō*-stem *waru*, and the two can co-exist.⁴ A few of the above, in particular *Seaxe*, *Myrce* and compounds in *-sāete* such as *Sumorsāete* ‘people of Somerset’, have their gen. in *-(e)na* from the *n*-stems, whilst forms such as *Sūþrige* ‘people of Surrey’ may have either gen. form. Since the form *Seaxan* ‘Saxons’ occurs throughout the period and is also an *n*-stem in OSax *Sahson*, it is reasonable to assume that the word transfers to the *i*-stems but retains the original gen. inflexion, which then is applied to related names, see Girvan (1931: §280a2).^{5,6}

¹ But with gen. *Denigea* alongside *Dena* in Beo, see §2.61n1.

² But names of foreign, esp. less frequent and classical, nationalities are often found in Latin forms, e.g. *Egipti*, *Persi*. Note also *Crēcas*, *Perseas*.

³ *Lēod* ‘man’ masc.sg. does occur, but perhaps it should be taken separately. Probably under the influence of *þēod* ‘people’, *lēode* appears to have been reanalysed as an *ō*-stem plural, for we find a nom.acc.pl. in *-a* in WS (including poetry) and regularly in Li. See Hamp (1977), with references.

⁴ For the opposite view, that *ware* is the original form and that *waru* is a later formation, see Girvan (1931: §280a2), Dahl (1938: 164–5).

⁵ It therefore seems inappropriate to take this set as a separate sub-class, as is apparently done in Campbell (1977: §610.7). Beo *Ēotena* ‘Jutes’ gen. (3×) is thus not surprising, as the name was like *Seaxna* in having original *n*-stem forms; possibly Beo *Ēotenum* dat. (2×) shows extension of *-n-* from the gen. (cf. §2.87), but more likely the scribe, unfamiliar with the by his day obscure national name, took <eotena> to be *eotena* ‘giants’ gen.pl. and assumed <eotum> in his exemplar was therefore an error for *eotenum* ‘giants’, see Fulk, Bjork and Niles (2009: 171).

⁶ To these examples should be added occasional *-waran*, alongside *ware*. In Ælfric the form is particularly frequent in *ceastergewaran* ‘citizens’.

4 *u-stem nouns*

2.71 This stem class is in origin parallel to the *i*-stems, and thus nouns could be of all three genders, although neuters were again very rare: Got *faihu* (= OE *feoh* ‘cattle’, transferred early to the *a*-stems), *filu* (= Angl *feolu* ‘many’, a relic form; cf. WS *fela*, from an oblique case-form), see also §2.73&n1. There is no distinction between the paradigms of masculine and feminine nouns of this stem class in Gmc.

2.72 In EWS, both masc. and fem. *u*-stems typically were declined according to the following paradigms:¹

	Light	Heavy
Singular		
<i>Nom.</i>	sunu <i>son</i>	hand ² <i>hand</i>
<i>Acc.</i>	sunu	hand
<i>Gen.</i>	suna	handa
<i>Dat.</i>	suna	handa
Plural		
<i>Nom.</i>	suna	handa
<i>Acc.</i>	suna	handa
<i>Gen.</i>	suna	handa
<i>Dat.</i>	sunum	handum

The only distinction between light and heavy stems is found in the nom.acc.sg., where, due to apocope, see §2.76, the heavy stems are inflexionless, whilst the light stems retain final *-u*.

¹ *Sunu* is masc., and a comparable fem. noun would be *duru* ‘door’; *hand* is fem., and a comparable masc. noun would be *feld*. The particular examples have been chosen because of their high frequency.

² On the etymology, see Devleeschouwer (1974).

2.73 This class, though sparsely represented, nevertheless contains a few nouns of very high frequency, and amongst the 100 most frequent noun lexemes, see §2.7, the following occur: *sunu* ‘son’, *winter* ‘winter’ (both masc.), *hand* ‘hand’ (fem.). Also originally to be included here is *dēað* ‘death’ (fem.), although it always has the inflexions of the *ō*-stems.

Additional examples of *u*-stems include:

- (a) masc. light: *medu* ‘mead’,¹ *sidu* ‘custom’, *spitu* ‘spit (for cooking)’² and a few nouns which are attested only in nom.acc.sg. forms: *bregu* ‘prince’, *heoru* ‘sword’, *lagu* ‘lake’, together with *magu* ‘youth’ which has nom.acc.pl. *magas* and also a nom.sg. *maga* from the *n*-stems.³
- (b) masc. heavy: *ford* ‘ford’, *weald* ‘weald’, *æppel* ‘apple’, *winter* ‘winter’,⁴ all of which have many forms with the inflexions of *u*-stems; *eard* ‘country’, *færeld* ‘journey’,⁵ *flōd* ‘flood’, *hād* ‘person’, *hearg* ‘shrine’, all of which are much more frequently found as *a*-stems.⁶
- (c) fem. light: *duru* ‘door’,⁷ *nosu* ‘nose’.
- (d) fem. heavy: *cweorn* ‘mill’, *flōr* ‘floor’, both of which transfer to the *ō*-stems, and *flōr* may also become a masc. *a*-stem, as at Beo 725, see §3.137.

¹ Occasionally neut., as in Lch2 52.1.16, 53.1.13 *medo*, see Ross (1954: 98). For other, later, forms of *medu*, see §3.119(1).

² Apart from the form *spitu*, there is a dat.sg. Notes2 11.71 *spite*, which is from the *a*-stems, and a dat.pl. ÆGram 89.12 *spitum*, which could be from either class.

³ When serving as the first constituent of a compound, the relic *u*-stems *friðu*- ‘peace’, *leoðu*- ‘limb’ retain *-u-*, but in isolation they are either neut. *a*-stems, *frið*, *lið* or, in the former case, a fem. *ō*-stem *friðu*, perhaps by association with forms such as *strengþu*, see §2.37, or simply *gyfu* ‘gift’, since the initial syllable is light.

⁴ And hence, by association, *sumor* ‘summer’. For discussion of *wintru* ‘winters’, a neut. form, see §3.119n6.

⁵ At CP(H) 257.9 *færelda* gen.sg. Note also CIGl 1.4071 *færeltu* nom.sg. with inflexional *-u*.

⁶ And then *flōd* is sometimes neut.

⁷ There are late forms such as *dyru* nom.pl., *dyre* dat.sg., which appear to be on the analogy of *hnutu*, see van Helten (1910: 471).

2.74 The paradigm of *sunu* can be traced back to an early PGmc paradigm of the following type, with the same inflexions on heavy as on light stems:

	Singular	Plural
<i>Nom.</i>	*sunuz	*sunawez ¹
<i>Acc.</i>	*sunum	*sununz
<i>Gen.</i>	*sunauz	*sunewōom
<i>Dat.</i>	*sunōu ²	*sunumiz

¹ For this and the acc.pl., see further the discussion in §2.75n1.

² In origin a locative ending, PIE **-ōu*.

2.75 The phonological development of the forms cited above would produce a prehistoric OE paradigm of the following type:

	Singular	Plural
<i>Nom.</i>	*sunu	*sunō ¹
<i>Acc.</i>	*sunu	*sunō
<i>Gen.</i>	*sunō	*suniwō̃
<i>Dat.</i>	*sunō	*sunum

The acc.pl. form must be the result of syncretism with the nom.pl., as also occurs in, for example, masc. *a*-stems, cf. §2.14.

¹ The usual reconstruction for the PGmc nom.pl. itself is **-ewez*, which regularly gives Got *-jus* (*sunjus*, *handjus*, etc.), and clearly OE *-a* cannot be a descendant of that PGmc form. Following in part a suggestion by C.E. Bazell, see Campbell (1977: §612n1), it may be possible to suppose a development of **-ewez* > **-euz*. This would eventually give a normal diphthong **-eu*, but any subsequent development to *-a* seems obscure. See further the objections of Bammesberger (1985a: 366). The usual assumption is that *-a* reflects PGmc **-awez*, an ablaut alternant of the usual PGmc form, which could develop as **-awiz* > **-auz* > **-au*, with subsequent development as for the gen.dat.sg. But there is no evidence outside of OE, in any IE language, for such an ablaut alternant. Bammesberger (1985a), acting on a suggestion of Dahl (1938: 182), argues that *-a* represents the reflex of a dual inflexion.

2.76 The development of this paradigm into OE is almost entirely regular. In the nom.acc.sg., final **-u* would be apocoped after a heavy syllable (Hogg 1992b: §6.20), but *-u* would otherwise remain, giving the contrast *sunu* : *hand*. In all the other inflexions except dat.pl., **/oi/* is shortened in Pre-OE to **/a/* (Hogg 1992b: §§6.27(4), 28), and this accounts for all forms, except that in the gen.pl. **-iwõ* was replaced by analogy to the *a*-stem ending, see §2.61.

2.77 Amongst early forms, the only one which requires discussion is RuneAuzon *fišcflōdu* ‘fish-flood’ (lit.). This is sometimes analysed as an acc.pl. with original *-u* < **-unz* (so Dahl, 1938: 182), sometimes as an error for *fišcflōd up* (Chadwick, 1912: 69n4).¹ More plausible than either of these explanations is the claim by Ball (1988: 110–11) that *-flōdu* is an *n*-stem because it is the second constituent of a compound.²

¹ Chadwick’s idea, though endorsed by Brunner (1965: §273A4) and Campbell (1977: §346n2), faces insuperable objections *metri causa*: see Fulk (1992: 378–9&n64).

² On *aetgāeru*, see §2.49n1.

III Consonantal stems

1 *n*-stem nouns

2.78 Nouns belonging to this class could be of all three genders, and we can reconstruct for PGmc clear differences in inflexion between masc. and fem. nouns in addition to expected differences between masc. and neut. nouns in the nom.acc.sg.&pl., see further §2.84ff. The vast majority of *n*-stems are formed with the PIE ablauting suffix **-en-/on-/ēn-/ōn-/n-* and are often called *ōn*-stems because of the shape of the suffix in the PIE

nom.sg. This usage is followed here, in order to distinguish this class from a minority class which appears to consist only of feminine Gmc de-adjectival formations and which is usually called the *m̄*-stem class. It should be remembered, however, that the suffixal vowel of *ōn*-stems was in ablaut variation as mentioned above.¹ The *ōn*-stems are discussed in §§2.80–7 and the *m̄*-stems in §§2.88–90.

¹ For examples of OE reflexes of variant ablaut grades, see §2.87.

2.79 For early PGmc we may assume for all consonantal stems a shared set of inflexional endings which were added to the class-forming suffix that ended the stem or, in the case of the root-stems, directly to the root. These inflexions were as follows:

	Singular	Plural
<i>Nom.</i>	*-z/-Ø	*-iz
<i>Acc.</i> ¹	*-um	*-unz
<i>Gen.</i>	*-(a)s ²	*-ōom ³
<i>Dat.-Instr.</i>	*-i	*-(u)miz

The usual form of the nom.sg. was presumably *-z < PIE *-s, but in uter consonantal stems, the nom. sg. in PIE lacked *-s and had a long vowel in the root or stem-forming suffix, e.g. PIE **dōn* nom.sg., **dont-ŋ* acc.sg. ‘tooth’, probably as the result of compensatory lengthening upon loss of *-s.⁴ In Gmc, the *n*-stems retain this irregularity, whilst other consonantal stems for the most part have reintroduced the oblique stem to the nom.sg.,⁵ and all these but the *r*-stems have reintroduced *-z as the nom.sg. inflexion, see Bammesberger (1990a: 190–2).

¹ Of course, for neut. nouns the acc. would be identical to the nom.

² On the gen.sg., see §2.6n4.

³ On trimoric vowels like **ōo*, see Hogg (1992b: §§6.27&n1) and §2.6n2 above. The gen.pl. ending apparently was trimoric in consonant stems and *i*- and *u*-stems as well as *a*- and *ō*-stems, see Jasanoff (2003: 22).

⁴ Such is the argument of Szemerényi (1996: §§6.2.7.1–6); cf. Bammesberger (1990a: 166–8), entertaining the older view of a lengthened ablaut grade. In the example given, the development of the nom.sg. is **dont-s* > **dons-s* > **dōn*. On other problems with the vocalism, see Lass (1986).

⁵ A prominent exception is OE *fōt* ‘foot’ and its Gmc cognates.

(a) *ōn*-stems

2.80 In EWS, *ōn*-stems typically were declined according to the following paradigms:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	<i>guma man</i>	<i>ēage eye</i> ¹	<i>tunge tongue</i>
<i>Acc.</i>	<i>guman</i>	<i>ēage</i>	<i>tungan</i>
<i>Gen.</i>	<i>guman</i>	<i>ēagan</i>	<i>tungan</i>
<i>Dat.</i>	<i>guman</i>	<i>ēagan</i>	<i>tungan</i>
Plural			
<i>Nom.</i>	<i>guman</i>	<i>ēagan</i>	<i>tungan</i>
<i>Acc.</i>	<i>guman</i>	<i>ēagan</i>	<i>tungan</i>
<i>Gen.</i>	<i>gumena</i>	<i>ēagena</i>	<i>tungena</i>
<i>Dat.</i>	<i>gumum</i>	<i>ēagum</i>	<i>tungum</i>

As may be seen, the only differences in inflexion among the genders arise in the nom.sg. and, with neuters only, the acc.sg.

¹ On the palatalized consonant here, see Hogg (1992b: §§7.41(1), 42), and note especially the analogically extended palatalized consonant of CP 273.8, 287.12 *ēagean*.

2.81 This class contains a very large number of masc. and fem. nouns, comprising 10–15% of the total number of nouns in OE, see §2.7. The number of neut. nouns which remain in OE, however, is extremely small, see below for details. Amongst the 100 most frequent lexemes, the following *ōn*-stems occur:

- (a) masc.: *līchama* ‘body’, *mōna* ‘moon’ (occasionally fem., probably under Lat influence), *nama* ‘name’,¹ *wita* ‘sage’;
- (b) neut.: *ēage* ‘eye’;
- (c) fem.: *cyriče* ‘church’, *eorþe* ‘earth’, *heorte* ‘heart’, *sunne* ‘sun’.

The only other neut. *ōn*-stems are: *ēare* ‘ear’ and *wange* ‘cheek’ (along with *þunwange* ‘temple (of the head)’), which has a variety of other inflexions: gen.sg. *wonges*, dat.sg. *-wange*, nom.pl. *wangas*, *-wonge*, *-wonga*, gen.pl. *-wonga*. The range of *ōn*-stems can be observed from the following typical examples:²

- (a) masc.: *anda* ‘envy’, *andsaca* ‘adversary’, *bana* ‘slayer’, *bera* ‘bear’, *boga* ‘bow’, *cnapa* ‘boy’, *crabba* ‘crab’, *docga* ‘dog’, *eafora* ‘son’, *gefā* ‘enemy’,³ *gefēa* ‘joy’, *gefēra* ‘companion’, *flota* ‘sailor’, *frēa* ‘lord’, *gealga* ‘gallows’, *hana* ‘cock’, *lida* ‘sailor’, *naca* ‘boat’, *nefa* ‘nephew’, *rā* ‘roe’, *scucca* ‘demon’, *steorra* ‘star’, *twēo* ‘doubt’, *þearfa* ‘pauper’, *wēa* ‘woe’;

- (b) fem.: *ælmesse* ‘alms’, *bēo* ‘bee’, *burne* ‘stream’, *cēo* ‘crow’ (see §3.114n5), *ceole* ‘throat’, *cuppe* ‘cup’, *cwene* ‘woman’, *dā* ‘doe’, *flā* ‘arrow’, *folde* ‘earth’, *hearpe* ‘harp’, *hrūse* ‘earth’, *næddre* ‘adder’, *rēo* ‘blanket’, *sēo* ‘pupil of eye’, *tā* ‘toe’, *þō* ‘clay’, *wīse* ‘manner’, *wulle* ‘wool’.

¹ This and fem. *heorte* (below) were originally PGmc neuters.

² There are considerably fewer fem. *ōn*-stems than masc. ones.

³ The paradigm of vowel-final *ōn*-stems follows that of the other nouns, with some marginal but predictable differences. For details and discussion, see §§3.110–15.

2.82 OE inherited from PGmc a sub-class of nouns in which the *ōn*-suffix was preceded by */j/, hence *jōn*-stems. In OE this sub-class inflects according to the paradigms set out in §2.80 and hence is not to be distinguished from the simple *ōn*-stems, although the nouns are recognizable from the presence of *i*-umlaut in the root vowel and/or WGmc gemination. Hence we find examples of the type: *bylða* ‘builder’, *dēma* ‘judge’, *wyrhta* ‘worker’ (all masc.), *bēce* ‘beech’,¹ *byrne* ‘corselet’, *dæge* ‘baker’ (all fem.), which show *i*-umlaut; and: *wræcca* ‘exile’ (masc.), *smiþpe* ‘smithy’ (fem.), *berige* ‘berry’ (fem.) which show either gemination or retention of /j/ after /r/.²

¹ On the etymology, see §2.111n4. On late developments, see §3.143.

² For other *ōn*-stems which in PGmc differed morphologically in ways parallel to the *jōn*-stems, see Bammesberger (1990a: 183ff.). Such nouns are not to be distinguished from simple *ōn*-stems in OE.

2.83 The most important suffixes associated with the *ōn*-stems are the fem. agentive suffixes *-estre*,¹ *-icge*,² the former of which is WS, the latter Angl, see Schabram (1970). Typical examples of these suffixes are: *bæcestre* ‘baker’,³ *bigenestre* ‘female worshipper’, *byrdestre*, *-icge* ‘female weaver’, *cempestre* ‘female soldier’, (-)*cennestre*, *-icge* ‘mother’, *dryicge* ‘sorceress’,⁴ *fiðelestre* ‘female fiddler’, *hearpestre* ‘female harper’, *hlēapestre* ‘female dancer’, *luf(i)estre* ‘female lover’, *scēricge* ‘actress’, *synnicge* ‘sinful woman’, and others. Other, less frequent suffixes which also form *ōn*-stems are: *-ele*, as in *hacele* ‘cloak’, *swingele* ‘scourge’ and many Lat loans such as *cugele* ‘cowl’, *fæcele* ‘torch’, *ferеле* ‘rod’, *fifele* ‘buckle’, all from Lat first-declension nouns in *-ul(l)a*; *-ige* in *mōdrige* ‘maternal aunt’;⁵ the quasi-suffix *-bora* ‘bearer’⁶ in *mundbora* ‘protector’, *rædbora* ‘counsellor’, *sweordbora* ‘swordsmen’, etc.

¹ This suffix derives alternately from PGmc **-astrijōn-* and **-istrijōn-*, see Kluge (1926: §§48–51), and thus OE *-estre* might or might not be expected to produce umlaut of the root vowel and, under appropriate conditions, affrication. In fact, umlaut (and, presumably, affrication) is almost entirely confined to those examples in which the verb from which the noun is derived normally shows umlaut. Thus, for example, there is umlaut in *lārestre* ‘female teacher’ (cf. *lāran* ‘teach’), *bepæcestre* ‘harlot’ (cf. *bepæcan*

‘deceive’) but not in *luf(i)estre* ‘female lover’ (cf. *lufian* ‘love’), *hlēapestre* ‘female dancer’ (cf. *hlēapan* ‘spring’). An exception is *cempestre* ‘female soldier’ (cf. *campian* ‘fight’), perhaps derived instead from *cempa* ‘warrior’.

² Historically these are *jōn*-stems; *-icēge* < **-iggjōn* shows WGmc gemination and OE palatalization and affrication.

³ Originally fem. but also used for eunuchs, and then used to gloss Lat *pistor* as well as *pistrīx* ‘miller or baker’.

⁴ On the quantity of the root vowel, see §2.57n4.

⁵ But *hlāfdiǰe* ‘lady’ is an obscured compound (*hlāf-dīǰe*).

⁶ The simplex *bora* appears to occur only at AldV 3.1.72.

2.84 The inflexional patterns of the *ōn*-stems were restructured after the PGmc period, but on the basis of comparative evidence, the following paradigms may be assumed very tentatively for an early stage of PGmc:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	* <i>ʒumōom</i>	* <i>auʒōn</i>	* <i>tungōn</i>
<i>Acc.</i>	* <i>ʒumunum</i> ¹	* <i>auʒōn</i>	* <i>tungūnum</i> ¹
<i>Gen.</i>	* <i>ʒumenaz</i>	* <i>auʒenaz</i>	* <i>tungenaz</i>
<i>Dat.</i>	* <i>ʒumeni</i>	* <i>auʒeni</i>	* <i>tungeni</i>
Plural			
<i>Nom.</i>	* <i>ʒumanez</i>	* <i>auʒanō</i>	* <i>tunganez</i>
<i>Acc.</i>	* <i>ʒumununz</i> ¹	* <i>auʒanō</i>	* <i>tungūnunz</i> ¹
<i>Gen.</i>	* <i>ʒumanōom</i>	* <i>auʒanōom</i>	* <i>tunganōom</i>
<i>Dat.</i>	* <i>ʒumonmiz</i> ²	* <i>auʒonmiz</i>	* <i>tungonmiz</i>

On the difficulties that attend reconstruction of the PGmc forms, due to subsequent extensive analogical remodelling, see Ringe (2006: 274–6), with references. The nominative singular is particularly difficult: see Jasanoff (2002). The Gothic and North Germanic *n*-stems suggest a rather different sort of paradigm.

¹ In these forms, PIE **o* or **ō* has resulted in PGmc **ū* before **u* in the following syllable, see Hogg (1992b: §3.34). To the contrary, Bammesberger (1990a: 169) regards the suffix **-un-* in the acc.sg.masc. as a secondary formation derived from the dat.pl.

² The vowel **-o-* in the ending **-onmiz* is assumed to have remained (later to become **-u-*), rather than changed to **-a-*, on the same basis as described in Hogg (1992b: §3.34), see Krahe and Meid (1969: II, 47). The paradigm is thus perhaps not precisely a synchronic representation, since **o* has already developed to **u* in the cases addressed in n1. On the later development of the ending, see §2.85. Alternatively, the *n*-suffix may have appeared in the PIE reduced grade, giving the PGmc ending **-un-miz*, see Bammesberger (1990a: 170).

2.85 The Pre-OE paradigms that must underlie the EWS ones given in §2.80 appear to have been the following:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	*zumō	*auza	*tunga
<i>Acc.</i>	*zumun	*auza	*tungun
<i>Gen.</i>	*zuman	*auzan	*tungan
<i>Dat.</i>	*zuman	*auzan	*tungan
Plural			
<i>Nom.</i>	*zuman	*auzan	*tungan
<i>Acc.</i>	*zumun	*auzan	*tungun
<i>Gen.</i>	*zumanō	*auzanō	*tunganō
<i>Dat.</i>	*zumum	*aumum	*tungum

It will be seen that in most cases the stem formative, whose vowel alternated $e \sim a \sim o \sim u \sim \bar{o}$ in PGmc, has been standardized as *-an-, or was to be so standardized at a later date, in the instance of *-un.¹ Most of these inflexions then develop unchanged into EWS. In the masc.nom.sg., final */o:/ is shortened to /a/ (Hogg, 1992b: §§6.27(4), 6.28), whilst in the neut.fem.nom.sg., */a/ is subject to regular first fronting to */æ/ > /e/ (ibid.: §6.2). The usual form of the gen.pl. is -ena,² since in a sequence of two unstressed back vowels the first vowel generally shifts in OE to /ə/, see ibid.: §6.64. Only the dat.pl. inflexion poses particular difficulties. Here it is assumed that *-onmiz developed to *-ummiz, with later degemination and regular loss of *-iz, see §2.84n2. It is of course also possible that OE -um is analogical, since this is the usual ending in other stem classes.

¹ Retention of *-un into Pre-OE is necessary to account for certain Nbr developments, see §§2.86, 3.108.

² For other forms, see §2.86.

2.86 In the earliest texts there are a number of words with nom.sg.fem -æ, showing an earlier state of that inflexion, for details of which see Hogg (1992b: §6.49). Of more interest are RuneAuzon *galgu* ‘gallows’ acc.sg.masc., CædH *foldu* ‘earth’ acc.sg.fem., LRid *eorðu* ‘earth’ acc.sg.fem. These may show the regular development of unlevelled *-ūnum, see ibid.: §3.34, with Nbr loss of final -n (ibid.: §7.98).¹ An early example of gen.pl. -ana (§2.85) is seen in CorpGl 687 -*doccana* ‘muscles’, and this form remains regular in INbr and frequent in Ru1, see §3.108. In poetry especially there is a strong tendency to syncopate the medial vowel after a heavy syllable, hence *brōgna* ‘terrors, monsters’, *ēagna* ‘eyes’, *ūhtna* ‘pre-dawns’.² In some late texts a sometimes syncopated dat.pl. ending -num is found rarely: AldV 13.1 (Nap) 3370 *nefenum* ‘nephews’, 3843 *tānum* ‘toes’, *lēonum* ‘lions’ (several times in Ælfric); on *oxnum* ‘oxen’, see §2.87n1; on *Ēotenum* ‘Jutes’, §2.70n5.

¹ For further discussion, see Bammesberger (1990a: 169), but also see §3.108 for possibly relevant forms in INbr, also Ross (1937: 82–7).

² This is also common with proper names, hence *Seaxna* ‘of the Saxons’ and similar forms, see §2.70.

2.87 Two *ōn*-stems show variation throughout the period. *Oxa* ‘ox’ has gen.pl. *oxna* alongside *oxena* and dat.pl. *oxnum*.¹ *Oxna* is the usual form in Lch and is found occasionally in some Anglian and Anglian-derived texts, as well as in some charters, whilst Ælfric uses *oxena*. *Oxna* (cf. Got *aubsne*) and *oxnum* probably represent a zero-grade ablaut variant of the *n*-suffix, perhaps also to be reconstructed in nom.pl. **oxsniz* > **æxsn*, giving (with syllabification of the final sonorant) PsGl(A) *oexen* (2×), INbr *exen*, *exin* (extended also to the acc.pl.) beside the usual *oxan*.² The usually fem. plural *ēastron* ‘Easter’ nom.acc. is from the lengthened grade *-ōn-*, but its nom.sg. is regular *ēastre*. It also occurs with an *a*-stem neut. plural *ēastru*, *ēastro*, showing a retained *-u*.³

¹ The latter occurs only in Ch 328 (2×), a contemporary charter dated 858, and so probably not showing the late syncope even after heavy syllables that is discussed in Hogg (1992b: §6.71). It is possible that this is an archaism (the usual form is *oxum*), but this would require a different analysis of the dat.pl. of *ōn*-stems in PGmc than that offered in §2.85, and so it is usually regarded as analogical to the gen.pl. The supposition that it is an archaism is tempting because the gen.pl. certainly is, cf. Got *aūbsnē* gen.pl., whilst the usual gen.pl. ending in Got masc. *n*-stems is *-anē*.

² Alternatively, the PIE ablaut grade of the *n*-suffix may have been **-en-*, producing PGmc nom.pl. **oxsiniz*, with the same outcome.

³ For the inflexion of vowel-final *ōn*-stems, e.g. *gēfēa* ‘joy’, see §3.110ff.

(b) *īn*-stems

2.88 There existed in PGmc a group of *n*-stems bearing the suffix **-īn-*, reflected e.g. in Got *managei*, pl. *manageins* ‘crowd’. These nouns were all fem. de-adjectival formations. By the OE period, however, all these nouns had transferred to the *ō*-stems under the influence of the parallel fem. nouns with the suffix **-ipō*.¹ Examples of these nouns are: *byldu* ‘boldness’, *brēdu* ‘breadth’, *bysgu* ‘trouble’, *enġu* ‘narrowness’, *fyllu* ‘fullness’, *hælu* ‘health’, *hætu* ‘heat’, *hyldu* ‘favour’, *lenġu*, *lenġeo* ‘length’, *menġu*, *menġeo* ‘multitude’, *mīcelu* ‘greatness’, *ofermēdu* ‘pride’, *snyttru* ‘wisdom’, *strenġu*, *strenġeo* ‘strength’, *þēostru* ‘darkness’, *wæstmbæru* ‘fertility’, *wlenġu*, *wlenġeo* ‘pride’, *wyrþu* ‘honour’, *yldu* ‘age’.² Spellings like *lenġeo*, *menġeo* imply that transferral to the *ō*-stems was relatively late, after the palatalization of stem-final *g*.

¹ For a very different account, see Ringe (2002: 149&n42), and cf. Bammesberger (1975).

² Theoretically, **oferfyrru* ‘great distance’ should also be included here, although only Or 19.20 *oferfyrru* dat.sg. occurs.

2.89 The inflexion of these nouns, which appear mostly in the sg. only, normally follows that of other \bar{o} -stems, for which see §2.35.¹ However, acc.gen.dat.sg., nom.acc.pl. forms in *-u*, *-o* occasionally occur alongside the expected forms, e.g. PsGl(A) 60.4 *strengu* gen.sg., suggestive of an invariant stereotyped form, see Girvan (1931: §287a2).²

¹ Campbell (1977: §473) explains oblique *-e* as the correct phonological result of the loss of final **-n* after original **-ī-*. Such a development is difficult to substantiate, but see the remarks on the ending of the subjunctive plural in EWS, §6.24.

² Additionally, some of these nouns have alternative forms from other classes, e.g. *hæte* (*ōn*-stem), *hēostre* (*ja*-stem), as well as individual forms especially from the *a*-stems, e.g. DurRitGl 83.8 *ældes* gen.sg.; on the latter type see also §3.75.

2.90 The principal sign of the origin of these nouns is the presence of *i*-umlaut in the stem vowel, as in all the examples quoted in §2.88. Additionally, spellings such as *menigeo* show palatalization of the stem-final velar.¹ A particular characteristic of these nouns is the usual presence of inflexional *-u* in the nom.sg., where it might have been expected to undergo apocope after a heavy syllable. Apocopated forms such as *fyll*, *hæl*, *lenġ*, *ylđ* are found in LWS, the last three in Ælfric, and are most probably due to the association with *īþō*-stems and their development in LWS, see §2.37&n5.

¹ On the other hand, it is difficult to interpret unambiguously spellings of the type <menigu> in which there is no diacritic to indicate the value of the consonant, see Hogg (1992b: §2.68). However, the variant *meniu*, frequent in Ælfric, implies that palatalization was always present, as do post-Conquest developments.

2 *r*-stem nouns

2.91 By the time of PGmc, the originally productive PIE *r*-stems were restricted to nouns expressing kinship relations, and hence in OE the only *r*-stems which persisted were the five nouns *brōðor* ‘brother’, *dohtor* ‘daughter’, *fæder* ‘father’, *mōdor* ‘mother’, *sweostor* ‘sister’. Of these, *brōðor*, *fæder*, *mōdor* are amongst the 100 most frequent lexemes, see §2.7. The paradigms of these five *r*-stems in EWS were as follows:

Singular

<i>Nom.</i>	brōðor	dohtor	fæder	mōdor	sweostor
<i>Acc.</i>	brōðor	dohtor	fæder	mōdor	sweostor
<i>Gen.</i>	brōðor	dohtor	fæder	mōdor	sweostor
<i>Dat.</i>	brēðer	dehter	fæder	mēder	sweostor

Plural

<i>Nom.</i>	brōðor, -ru ¹	dohtor, -ra ¹	fæd(e)ras	(mōdru, -a) ²	sweostor ³
<i>Acc.</i>	brōðor, -ru ¹	dohtor, -ra ¹	fæd(e)ras	(mōdru, -a) ²	sweostor ³
<i>Gen.</i>	brōðra	dohtra	fæd(e)ra	mōdra	sweostrā
<i>Dat.</i>	brōðrum	dohtrum	fæd(e)rum	mōdrum	sweostrum

The formative *-r-* originally was preceded by an ablauting vowel, see further §2.92.

¹ Usually with syncope, i.e. *brōðru*, *dohtru*, *dohtra*, but cf. in LWS PsGl(D,E) *dohtora*. Also in LWS, *dohtru* is attested and *brōðra* is not uncommon. In EWS, *dohtra* is actually attested only in the acc.pl., at Or 2 2.39.2.

² Neither form occurs in EWS for nom.acc.pl., although they are to be found in later texts. Ælfric has *mōdru* at ÆCHom II 12.2 124.491.

³ Also *swustra* not infrequently in LWS, but rarely *swustru*: ÆCHom II 260.15, Mk(WSCp) 10.30.

2.92 The crucial factor in the formation of these nouns is the nature of the ablauting stem formative, for the inflexions are those outlined in §2.79 (with *-Ø* in the nom.sg.). For the EWS paradigms cited above we may assume a base form of PGmc **-er*, which would develop to **-æer* (Hogg 1992b: §3.30 and Stiles 1988: 339), for the nom.acc.sg.pl. and zero-grade for the gen.dat.sg.pl.¹

¹ On variations in vowel grade and results in OE, see §2.94.

2.93 In the development of the inflexional system from PGmc to EWS we can distinguish between those inflexions in which the final syllable is lost through regular phonological change and without other consequence, and those inflexions which either (i) though lost, leave an effect on the stem vowel or (ii) are retained or innovated.¹ To the first type belong nom.acc.gen.sg., to the third (type (ii)), gen.dat.pl. We deal with the other inflexions (type (i)) immediately below:

dat.sg.: here the ablaut variation would produce a PGmc structure of the type **brōþri*, and the final *-i* would remain, cf. Hogg (1992b: §3.29), long enough to cause *i*-umlaut before being apocopated. This is the source of *brēðer*, *dehter*, *mēder*,² whilst *swiostor* occurs once alongside *sweostor*.³ *Fæder* has been restructured by analogy to the nom.sg.

nom.acc.pl.: it is possible that the inflexion *-u* is to be derived from acc.pl. forms with zero grade (*pace* Brunner, 1965: §285A1) and then extended to the nom.pl.; lack of apocope might then be explained as due to an alternative form with a different vowel grade, presumably from the nom.pl.⁴ More likely, however, is the alternative explanation of Wright and Wright (1925: §415) that *-u* may be from the collective neut.pls. *gebrōþru* 'brethren', *gesweostru*. This explains *brōþru*, *swustru*, as well as forms with final *-a*, since *-a* varies freely with *-u* in such neuter plurals. Alternatively, final *-a* in *dohtra*, *mōdra*, *swustra* might be explained as derived from the *ō*-stems, but this will not explain *brōðra*. Still, since *brōðra* is not found in EWS, whilst *dohtra* is (1×), it may be that *brōðra*

is by analogy to it, and the ending may be derived from the *ō*-stems after all. *Fæderas* is plainly re-formed on the basis of the *a*-stems.

¹ See §2.94 on the variation in the vowel of the second (unstressed) syllable of each of these words.

² PsGl(A) *mōēder*, *doehter* show extension of umlaut to gen.sg. Note also Ch 1508.45 *rehtmēōdrencynn* ‘direct maternal line’ (with <eo> for <oe>). For discussion of levelling or extension in later texts, see §3.130.

³ Campbell (1977: §210.2n3) records the following observations about *sweoster*. The word does not show umlaut in Nbr (Li *suoester*, *soester*, Ru2 *swester*) or in Merc (the word does not occur in PsGl(A), whilst Ru1 has *swæster*, but also *swuster*, to be derived by combinative back umlaut, Hogg (1992b: §5.109), from **swister*, with *i*-umlaut, see Brunner (1965: §285A1)). On Campbell’s view, EWS nom.sg. *swiostor* (1x, Or 3 9.69.5), beside usual *sweostor*, *swostor*, may be significant, given the occurrence of *swustor* in LWS.

⁴ That is, acc.pl. **brōþrunz* could have been re-formed as **brōþerunz* by analogy to nom.pl. **brōþeriz*; a similar development is found in Greek and Old Church Slavonic. But Got *brōþrunz* acc.pl. suggests otherwise. A very unlikely alternative suggestion: Ross (1977).

2.94 Perhaps the only significant form in early texts is RuneAuzon *gibrōþær* ‘brothers’, in which *-ær* appears to represent an earlier form of the ablaut vowel, see §2.92 and for another view Campbell (1977: §369). PsGl(A) *feadur* gen.sg. and CædH *-fadur* gen.sg. (= ON *fōður*) may represent an archaism, cf. Sanskrit gen.sg. *pitúr* < PIE **pHtr̥s*, also Got gen.sg. *brōþrs*, though Bammesberger (1983; 1990a: 207) makes a case for origins in analogical influence from the dat.pl.¹ Also in PsGl(A), there is gemination in nom.gen.pl. *feddra(s)*, alongside ungeminated forms, and this development may underlie occasional instances of *fæder* in verse that seem to require a heavy initial syllable, see Fulk (1992: §199). The variation in the quality of the vowel of the unstressed syllable in EWS and later texts is primarily a function of vowel harmony, whereby the unstressed vowel appears as *e* after a stressed front vowel and *o* after a stressed back vowel, see Hogg (1992b: §6.38). That is, the PGmc sequence **-er(-)* had been reduced to a syllabic /r/ in Pre-OE.² But in Ru2 and DurRitGl, final *-er* and *-or* are largely interchangeable, whilst in Li and Ru1, *-er* prevails.³

¹ But for other inflexions PsGl(A) has forms based on nom.sg. *feder*, except *feadrum* dat.pl.

² It seems unnecessary to assume, with Boutkan (1992), that **-er(-)* lost all syllabicity and the remaining **-r* was then syllabified. Boutkan’s further assumption that syllabification of /r/ was always to **-ur* is intended to explain forms like dat.sg. *sweostor* and *s*-stems like *sigor* ‘victory’. But in the former, at least, *-or* is the natural result of the analogical removal of umlaut.

³ This is not because of late merger of unstressed /u/ and /e/, as maintained by Boutkan (1992: 11), but because of the way syllabic sonorants are represented in each text, see Hogg (1992b: §6.38).

3 *s-stem nouns*

2.95 Although there were a few uter *s*-stems in PIE, neuters predominated, and this stem class in PGmc consisted of neuter nouns only, with stems formed from a root to which the original ablauting suffix **-es-/os-* was added.¹ The *s*-stems, however, were subject to considerable re-formation in their development to OE, both in their treatment of the stem formative and their adoption of inflexions from the neut. *a*-stems. By normal sound change we should expect the vowel of the ablaut grade **-es-* to develop as **-i-* and then cause *i*-umlaut, whilst suffixal **-s-* > **-z-* after the unstressed vowel would develop to *-r-* by rhotacism, see Hogg (1992b: §4.15).

¹ Some would add a zero-grade **-s-* to this series, but see §2.99n2.

2.96 Perhaps the most archaic type of paradigm is found in a variety of forms of *dōgor* ‘day’, as follows:¹

	Singular	Plural
<i>Nom.</i>	dōēġ (Li)	dōgor (Li)
<i>Acc.</i>	dōēġ (Li)	dōgor (Li)
<i>Gen.</i>	dōgores (Beo)	dōg(o)ra (Beo)
<i>Dat.</i>	dōgor(e) ² (Beo)	dōgrum (Li, Beo)

Here we can see *i*-umlaut of the stem vowel in the nom.acc.sg. due to the stem formative **-iz*,³ which is then lost finally, whilst the other forms show retention of the suffix **-z-* > *-r* preceded by an unstressed vowel whose quality is due to vowel harmony, as in *r*-stems, see §2.94. In all cases, however, the noun has adopted the inflexions of the neut. *a*-stems. Such umlauting types are common in Angl, where PsGl(A), CorpGl, ErfGl all have nom.acc.sg. *cælf* ‘calf’, and DurRitGl similarly has *lomb* ‘lamb’. Archaic forms of other inflexions in these nouns include PsGl(A) nom.acc.pl. *calfur*, *lombur* and Li, Ru1 *lombor*, all beside *calferu*, *lomberu*, *-o*, see also §2.99. For later examples of this umlauting type, see §3.53n2.

¹ The forms cited here are taken either from the Lindisfarne Gospels (Li) or from *Beowulf* (Beo). The nom.acc.sg. is often re-formed as *dōgor* on the basis of the inflected forms, see §2.99. Relevant examples in EWS are CP 281.13, Or 90.16 *dōgore* dat.sg.

² The endless dat.sg. occurs Beo 1395, 1797, but the latter is altered to *dōgore* under circumstances that suggest *dōgor* was what the scribe’s exemplar read, see Fulk, Bjork and Niles (2009: cxlv, xxxiii). These appear in Beo beside *dōgore* 2573, where the meter is inconclusive. The endless form is probably best explained as an archaic instrumental in PIE **-ā*; *dōgore* has acquired an *a*-stem ending.

³ Levelled into the nom.acc.sg., see §2.69.

2.97 In EWS the *s*-stems survive in two types only: (i) nouns in which *-r* appears in pl. inflexions but is absent from the sg.; (ii) nouns in which *-r* appears throughout the paradigm, including nom.acc.sg. In both types, however, *s*-stems regularly adopted the inflexions of the neut. *a*-stems, see §2.99 for exceptions. The first type is discussed in §§2.98–9, the second in §2.100.

2.98 Three nouns regularly belong to the first type above, and their paradigms are as follows:

Singular

<i>Nom.</i>	ċealf <i>calf</i>	lamb <i>lamb</i>	ǣġ <i>egg</i>
<i>Acc.</i>	ċealf	lamb	ǣġ
<i>Gen.</i>	ċealfes	lambes	ǣġes
<i>Dat.</i>	ċealfe	lambe	ǣġe

Plural

<i>Nom.</i>	ċealfru	lambru	ǣġru
<i>Acc.</i>	ċealfru	lambru	ǣġru
<i>Gen.</i>	ċealfra	lambra	ǣġra
<i>Dat.</i>	ċealfrum	lambrum	ǣġrum

2.99 The forms cited in §2.98 are all regular developments of these nouns after they have transferred to the neut. *a*-stems. On the final *-u* of the nom.acc.pl., see the discussion in §§3.54–5, also §3.56ff. on the relevant disyllabic type exemplified by *hċāfod* ‘head’. Sometimes these nouns appear to decline exactly as *hċāfod*, and then there are inflexionless examples of nom.acc.pl. in some Angl texts, e.g. PsGl(A) *calfur* (2×), *lombur*, lNbr *lombor* (4×), all alongside forms with *-ru*.¹ PsGl(A) 105.20 *calfur* shows an inflexionless gen.sg. which would be the expected development of the PGmc form **kaltbuzaz*.² A few other words have forms which demonstrate earlier adherence to the paradigms of §2.98, the most frequent of which is *ċild* ‘child’. Hence, alongside frequent forms which are not to be distinguished from neut. *a*-stems, e.g. *ċild* nom.acc.pl., we may note CP(H) 459.17 *ċilderu*. For the slightly different situation in Ælfric and other, later texts, see §§3.53–5.

¹ One explanation for the cases with *-ur*, *-or* is that they reflect forms with stem-final non-syllabic *-r* rather than **-ur*. That is, e.g., PGmc nom.acc.pl. **lambzō* develops to **lambr*, with later syllabification of **-r* upon loss of **-ō*, see Hogg (1992b: §6.38), and see Fulk (1988: 155–6). But since it is doubtful that zero-grade **-z-* occurred anywhere in the PGmc paradigm, it would be better to reconstruct **lambazō* (not **lambizō*: see §3.64), which would perhaps undergo syncope followed by apocope, producing Pre-OE **lambr*, see Bammesberger (1990a: 210). Alternatively, Campbell (1977: §635n1) proposes that **-ar-* (from **-az-*) changed to **-or-* before *u* in the next

syllable, see Hogg (1992b: §3.34). This explanation faces some difficulties, chief of which is that if these nouns were neuter in early Gmc, as appears to have been the case, there should not have occurred any case-forms in which PGmc **-a-* stood before **-u-* in the next syllable; thus, it would be necessary to assume, firstly, replacement of **-iz-* in the locative plural by **-az-* (since the PIE locative plural inflexion was **-su*), and, secondly, analogical extension of the resultant **-uz-* to other case-forms, though the locative plural seems an unlikely case to have exerted such analogical influence. (Note that Boutkan, 1992: 17–18, assumes that raising of PGmc **-a-* took place before **-ō-* as well as **-u-*, which would lead to the change of **-az-* to **-oz-* in the nom.acc.pl. But such an assumption would make it more difficult to explain developments in the *n*-stems, see §2.84.) As Campbell rightly remarks, it is not at all likely that *-ur, -or* reflects PIE **-əs-* (i.e., **-Hs-*), a view held by some *Junggrammatiker*. See also §§3.95ff. on the synchronic status of endings subject to *u*-apocope.

² But explaining the appearance of **-uz-* where **-iz-* or analogical **-az-* should be expected is difficult. Bammesberger (1990a: 209–10), supported by Schlerath (1995: 259), proposes the replacement of the alternants **-iz-/az-/z-* by **-iz-/az-/uz-* in PGmc by analogy to the alternations found in stems with sonorants, e.g. *n*-stems. That there was a zero-grade form of the *z*-suffix in PGmc, however, may be doubted on the basis of comparative evidence: see Szemerényi (1996: 174), but cf. Bammesberger (1990a: 212). Possibly *calfur* is by analogy to *feadur*, see §2.94.

2.100 The second type is undoubtedly due to re-formation of older nom.acc.sg. forms on the basis of inflected forms, hence *dōgor* ‘day’, cf. §2.96&n1. Similar examples include *ēar* ‘ear of corn’, *hālōr* ‘salvation’, *hæteru* ‘garments’,¹ *hōcor* ‘mockery’,² *hrōþor* ‘comfort’, *nicor* ‘water monster’,³ *salor* ‘hall’, *sigor* ‘victory’ (masc.), *wildor* ‘wild animal’,⁴ all without *i*-umlaut; *scērero* ‘shears’ nom.pl. (EpGl, CorpGl only), *stāner* ‘stone’ dat.sg. (INbr only), both with *i*-umlaut; *hrīþer* ‘cattle’, which shows both umlauted and unumlauted forms in other cases, e.g. *hrīþeru*, *hrūðeru* both nom.pl.⁵ The vocalism *-or* of *nicor*, *sigor*, *wildor*, for expected *-er*, is usually explained as due to original suffix ablaut, i.e. PIE **-os-* alongside **-es-*, and this is probably correct, although there are phonological and morphological difficulties.⁶

¹ Recorded only in the pl., but not a plurale tantum, see Bosworth and Toller (1898: *hætera*).

² Found only in dat.sg. *hōcere* and the compound *hōcorwyrde*.

³ Found only in inflected forms and in the compound *nicorbūs*. It is frequently masc.

⁴ More frequently folk etymology intervenes to give *wild(d)ēor*, and the original form is found only in inflected forms and as the first constituent of a compound.

⁵ A further example may be EpGl *bēger* ‘berries’ from sg. **bēg* (cf. *bēgbēam* ‘berry tree’), in which event INbr *wīnbēger*, pl. *wīnbēgera* would be a typical re-formation, see further Bately (1993: 511).

⁶ Some of these difficulties are discussed in §2.99n1. Boutkan (1992: 16–18) summarizes the approaches that have been taken. His own solution is to assume that Pre-OE **/r/* was always syllabified as **-ur*; but this is difficult to reconcile with the plain evidence that OE final syllabic */r/* was written <er> or <or> on the basis of the vocalism of the preceding syllable, see Hogg (1992b: §6.38). It seems likelier that *-or* in *sigor* and the like does not develop from a syllabic consonant.

2.101 Alongside many of the forms in §2.100 are found parallel nouns with *i*-umlaut, which are generally regarded as having transferred to the *i*-stems rather than the *a*-stems, e.g. *hrēþ* ~ *hrōþor*, *sele* ~ *salor*, *sigē* ~ *sigor*. This, however, may be misleading. It seems equally possible that either the umlauted or the unumlauted (more usually the former) form of the noun could be extended throughout the paradigm, and that the noun acquired exactly the same set of inflexions in either event, as would be predicted from the gradual disappearance of the *i*-stems as a separate class, §2.55ff.¹ For further examples, see the discussion in §2.69.

¹ The change is not a particularly early development, since, for example, the OHG cognate of *sigē/sigor* has been transferred to the *u*-stems. The later the transfer took place, the less likely it is that the *i*-stems remained a discrete declensional category at that time.

4 þ-stem nouns

2.102 In OE, few traces remain of this stem class, which in PIE was formed with suffix **-t-* preceded by a vocalic element, usually the ablauting vowel **-e-/o-*, which would give PGmc **-iþ-/aþ-*. However, **-uþ-* also occurs in Gmc, and its possible sources are various.¹ To this stem the usual consonantal inflexions appear to have been added, and the predicted development in OE of this class would have been for the final syllable to have been lost except in the nom.sg., where the stem formative **/θ/* (or **/z/* < **/s/* < PIE **/ts/*), being final, would have been lost. We should, therefore, obtain paradigms with nom.sg. having the reflex of the vocalic element that originally preceded **-þ-*, the remainder of the sg. and the nom.acc.pl. having zero inflexion, and the gen.dat.pl. having the inflexions *-a*, *-um* as in the *ōn*-stems. But in all stems the nom.sg. may be extended to the acc.sg., or, conversely, the stem with final consonant is not infrequently extended to the nom.sg.

¹ As Bammesberger (1990a: 215n356) remarks, in some instances the stem may have ended in PIE **-wet-*. In reduced grade, this would produce PGmc **-uþ-*. Another possibility is that **u* arose from PIE **o* when **u* stood in the next syllable, see Hogg (1992b: §3.34), as in the acc.pl., and then spread analogically to other cases.

2.103 Nouns which at least in part show signs of the expected paradigm are as follows:¹ *ealu* ‘ale’ neut., with gen.dat.sg. *ealoð* and gen.pl. *ealoða*, but also acc.sg. *ealopþ*;² *hæle* ‘man’ masc., with nom.pl. *hæleþ*, gen.pl. *hæleþa*, dat.pl. *hæleþum*, and alongside *hæle* the re-formed nom.acc.sg. *hæleþ* with pl. *hæleþas*, once *hæleþe* (Rim 60), like some agentive nouns in *-nd*, see §2.108; *mæg(e)þ* ‘maiden’ fem. has gen.dat.sg., nom.acc.pl. *mæg(e)þ*, gen.pl. *mæg(e)þa*, dat.pl. *mæg(e)þum*, but the nom.acc.sg. is always

mæg(e)þ; *mōnaþ* ‘month’ masc. has nom.pl. *mōnaþ* alongside *mōnþas* (on the syncope, see Hogg 1992b: §6.32), but otherwise follows the paradigm of the *a*-stems.

¹ *Nefa* ‘nephew’, which is cognate with Lat. *nepōs*, *nepōtis* is always an *ōn*-stem in OE.

² On the variety of forms of the stressed vowel, see firstly Hogg (1992b: §5.106(2)&n6), and on variation in the unstressed vowel, see *ibid.*: §6.60.

5 *nd-stem nouns*

2.104 This stem class comprises nominalized present participles which function as agentive nouns. These nouns are therefore formed with the characteristic OE *-end-* suffix of the pres.part., which is added directly to the root of the noun, *-e-* being lost if the root has a vocalic final, see below. In OE the pres.part. follows the paradigm of the *ja*-stems, but the *nd*-stems at least in origin share the inflexions of the root-stem nouns, on which see §§2.109–13. Almost all nouns in this stem class are masculine, the few exceptions being feminine.¹

¹ Of these exceptions the most important is *swelgend* ‘whirlpool’, which has a dat.sg. *swelgende*, an *ō*-stem form. It contrasts with masc. *swelgend* ‘glutton’, but in late texts it may also be masc. or neut. The other exceptions are found only in learned translations, where they are examples of natural gender, and except for their being modified by fem. adjs. or translating a feminine form (e.g. *londbūend* ‘settler’ rendering Lat *colonia*), they are indistinguishable from masculines: Brunner (1965: §287) offers the examples *wealdend* ‘ruler’, *fēond* ‘enemy’, and *timbrend* ‘architect’.

2.105 In EWS, *nd*-stems typically were declined according to the following paradigms:

Singular

<i>Nom.</i>	frēond <i>friend</i>	hettend <i>enemy</i>
<i>Acc.</i>	frēond	hettend
<i>Gen.</i>	frēondes	hettendes
<i>Dat.</i>	frīend, frēonde	hettende

Plural

<i>Nom.</i>	frīend	hettend, -e, -as
<i>Acc.</i>	frīend	hettend, -e, -as
<i>Gen.</i>	frēonda	hettendra
<i>Dat.</i>	frēondum	hettendum

As may be observed, there are differences in inflexion between monosyllabic and disyllabic *nd*-stems in the dat.sg. and throughout the plural except dat.pl.

2.106 This class consists of a large number of agentive masc. nouns, although many are of infrequent occurrence or are restructured during the period so that their origins are not always plain from the (partial) paradigms which they form. Two *nd*-stems occur amongst the 100 most frequent lexemes, namely *fēond* ‘enemy’, *hǣlend* ‘saviour’. But amongst the more frequent nouns which are certainly *nd*-stems, typical examples include: *tēond* ‘accuser’,¹ like *frēond*,² together with the reciprocals *ġefiend* ‘mutual enemies’, *ġefriend* ‘mutual friends’; *āgend* ‘owner’, *būend* ‘inhabitant’, *dēmend* ‘judge’, *wealdend* ‘ruler’, *wīgend* ‘warrior’, all like *hettend*.

¹ No umlauted forms occur, but note PsGl(C) 67.22 *tēonda* gen.pl.

² Possibly to be added here is El 359 *gōddēnd* ‘benefactor’ acc.pl. < **zōddoandiz*, although this is on the assumption that there is iterative *i*-umlaut in the second constituent, as in *endemes* < **andōmis*, see Hogg (1992b: §5.76). On the quantity of the root vowel in **doandiz*, see §6.143.

2.107 The paradigm of *frēond* can be traced back to the early PGmc paradigm presented below, with which compare the PGmc paradigm of the root-noun *fōt* in §2.112:¹

	Singular	Plural
<i>Nom.</i>	*frijōndz	*frijōndiz
<i>Acc.</i>	*frijōndum	*frijōndunz
<i>Gen.</i>	*frijōndiz	*frijōndōom
<i>Dat.</i>	*frijōndi	*frijōndumiz

¹ On the development in Gmc and OE of the stressed diphthong in *frēond*, see Hogg (1992b: §3.19(3)).

2.108 The development of the inflexional system from PGmc to EWS is in many respects parallel to that of root nouns, cf. §2.113. There are, however, a number of significant differences, especially in the dat.sg. and nom.acc.gen.pl., and only these forms are discussed below:¹ The most significant feature, therefore, of this stem class is that the stem vowel of monosyllabic nouns should be *i*-umlauted in the gen.dat.sg. and the nom.acc.pl.,^{2,3} whilst in disyllabic nouns *i*-umlaut should have affected the vowel of the second syllable in the same inflexions. In the latter case, however, *i*-umlauted vowels are found throughout the paradigm, to the complete exclusion of unumlauted. It is less probable that this is due to influence from dat.sg. or nom.acc.pl. than that the nouns are restructured according to the form of the pres.part., which, being a *ja*-stem, see §§2.104, 4.45, 6.28, always has the form *-end-* from **-andja-*, see the discussion of dat.sg., nom.acc.pl. forms below.

dat.sg.: here final **-i* should remain until the time of *i*-umlaut, when it would mutate the stem vowel of monosyllabic nouns before being apocopated after a heavy syllable (Hogg 1992b: §6.20), hence EWS *frīend*, LWS *fr̄ynd*. But the dat.sg. can, even in EWS, be re-formed according to the paradigm of the *a*-stems, and then the stem vowel remains unumlauted and the *a*-stem inflexion *-e* appears. In disyllabic nouns the inflexion of *a*-stems is always found, but the second syllable always has the unumlauted form *-end*, despite the restructuring.

nom.acc.pl.: here the WGmc loss of final **-z* (Hogg 1992b: §3.31) meant that this inflexion then developed in parallel to the dat.sg. In disyllabic nouns, however, even in EWS the alternative inflexions *-e*, *-as* are found, e.g. Oros 47.7 *ēhtende* ‘pursuers’ (alongside 140.1 *ēhtend*), CP(H) *waldendas* ‘rulers’ (3×); *-as* is clearly from the *a*-stems, whilst *-e* is from the adjectival forms of the pres.part. and is used in order to distinguish sg. and pl. inflexions.⁴ The unumlauted vowel of the second syllable is equally to be derived from the pres.part. As elsewhere, the acc.pl. fell together with the nom.pl. at an early stage.

gen.pl.: monosyllabic nouns have the predicted development of the PGmc inflexion, cf. §§2.13–14, but in disyllabic nouns the EWS inflexion is from the adjectival forms of the pres.part., cf. above.^{5,6}

¹ See, in particular for the unumlauted gen.sg., the parallel forms of the root-stem masculines, §2.113.

² Under the assumption that the acc.pl. adopted at an early date the inflexion of the nom.pl., see further below.

³ Late Nbr has only nom.acc.pl. *frīondas*, *frīondas* (and similar), re-formed in accordance with the *a*-stems. Similar forms are also found in Merc and in poetry, see Fulk (1992: 321), with references.

⁴ Even in the conservative language of verse, the inflexion of present participles and agentive nouns in *-nd-* is not kept strictly separate, see Fulk, Bjork and Niles (2009: 125, note on Beo 159), with references.

⁵ For extension of this gen.pl. formation to the remainder of the plural in later texts, see §3.131.

⁶ PsGl(A) *fienda*, *fiendum*, gen.dat.pl., are most probably to be taken as restructured disyllabic forms on the basis on the pres.part. rather than as examples of extension of *i*-umlaut, see further Hogg (1992b: §5.83&n5).

6 *Root-stem nouns*

2.109 The class of root-stem nouns was formed in PIE by the direct addition of inflexional suffixes to the root of a noun, without the presence of an intervening suffixal element. Nouns in this class could be only masc. or fem., see §2.3&n3. In PGmc it is likely that the two genders shared a single set of inflexions, but in the development to OE there were various restructurings which created distinctions between the two genders. In the fem. nouns there are distinctions between light- and heavy-stemmed nouns,

but these distinctions cannot be observed in masc. nouns, if only because light-stemmed masc. nouns are not found in the data.

2.110 In EWS, root nouns typically were declined according to the following paradigms:

	Masculine	Feminine	
		Light	Heavy
Singular			
<i>Nom.</i>	fōt <i>foot</i>	hnutu <i>nut</i>	bōc <i>book</i>
<i>Acc.</i>	fōt	(hnutu)	bōc
<i>Gen.</i>	fōtes	hnute	bēc
<i>Dat.</i>	fēt	hnyte	bēc
Plural			
<i>Nom.</i>	fēt	hnyte	bēc
<i>Acc.</i>	fēt	hnyte	bēc
<i>Gen.</i>	fōta	hnuta	bōca
<i>Dat.</i>	fōtum	hnutum	bōcum

The acc.sg. *hnutu* is not recorded but may be inferred from parallel forms such as *studu* ‘post’ acc.sg.

2.111 Although this class may have been reasonably large in PIE, in both PGmc and to an even greater extent in OE the membership was considerably reduced, so that only a small number of root nouns, mainly feminine, remain.¹ These nouns are, however, for the most part of high frequency. Thus, amongst the 100 most frequent lexemes, see §2.7, the following root-stem nouns occur: *fōt* ‘foot’, *man(n)* ‘person’,^{2,3} *tōþ* ‘tooth’ (all masc.), *bōc* ‘book’,⁴ *burh* ‘city’,⁵ *niht* ‘night’.⁶ The only other masc. root noun recorded in OE in addition to those cited above is apparently *ōs* ‘god’.⁷ There are rather more fem. nouns, including:

heavy stems: *āc* ‘oak’,⁸ *brōc* ‘legging’, *cū* ‘cow’, **dung* ‘prison’,⁹ *ēa* ‘river’,¹⁰ *furh* ‘furrow’, *furh* ‘fir’, *gāt* ‘goat’, *gōs* ‘goose’, *grūt* ‘meal’, *lūs* ‘louse’, *mūs* ‘mouse’, *sulh* ‘plough’, *turf* ‘turf’, *þrūh* ‘trough’, *wlōh* ‘fringe’;

light stems: *hnitu* ‘nit’,¹¹ *hnutu* ‘nut’, *studu* ‘post’;¹²
 bisyllabic stems: only *meoluc* ‘milk’, WS beside Angl *milc*, on which see Hogg (1992b: §3.29n3). On the apparent dat.pl. *meolcum*, Angl *milcum*, see §2.17n4.

¹ For an extensive survey of the Gmc forms, see Griepentrog (1995).

² On the rather difficult question of the original stem class of this noun, see Bammesberger (1990a: 201; 2000).

³ When *-man(n)* is the second constituent of a dithematic personal name, it always declines as an *a*-stem, thus Bede 4 260.22 *Ġearomonne* dat.sg. In Gothic, too, there occur some *a*-stem forms in compounds, but as the initial element, thus *mana-maurþrja*, *mana-seþs*. As the second element of a normal compound, however, as in *wifman* ‘woman’, OE *man* follows the paradigm of the simplex even when, as occasionally occurs, the noun changes gender. The paradigm of Got *manna* ‘person’ is a mixture of *n*-stem and root-stem forms, and thus it is probably no coincidence that OE *n*-stem *manna* is attested mostly as acc.sg. *mannan* (174× in the *DOEC*; cf. Got *mannan* acc.sg.): very likely an original, irregular paradigm has led to the creation of analogical forms, see Bammesberger (2000).

⁴ OE *bōc* ‘beech’ is presumably an *ō*-stem, like OSax *bōka*, though it is attested only in the nom.sg. On controversy over the etymological relation between ‘book’ and ‘beech’, see Pierce (2006).

⁵ But when *-burh* is the second constituent of a fem. dithematic personal name, it takes the inflexions of the *ō*-stems, e.g. *Æþelburge* acc.dat.sg. On the relation of *burh* to *beaeh* ‘barrow’, see Motz (1977).

⁶ In WS, *niht* regularly has an unlauded stem vowel throughout the paradigm and then has inflexions which closely parallel those of the *ō*-stems except in the nom.acc.pl., which is normally *niht*. Unmutated *neah* is rare in WS except in Lch II, where it is frequently found in the temporal locative construction *on neah*. In Angl dialects unmutated *næht* and variants is the usual form, see further §3.127.

⁷ Note MCharm 4 *ēsa* gen.pl. (2×).

⁸ But as the name of a rune we find Rid 42.10 *ācas*. On the etymology, see now Seebold (1999), but cf. Lewickij (2003: 100–3).

⁹ Only And 1272 *ding* dat.sg.

¹⁰ But usually *ēa* throughout the sg., although Or in particular has many examples of *ie* for gen.dat.sg. The early nature of the OE evidence for inflexion as a root-stem thus tells against the claim of Seldeslachts (1992: 303), against Bammesberger (1990a: 199), that such inflexion is an OE innovation. (Transferral of any noun to the root-stems in Pre-OE is in any case difficult to credit, given how unproductive this class was after the PGmc period.) In the plural the most frequent forms are nom.acc.gen. *ēa*, dat. *ēam*, *ēaum*, but even in EWS the re-formed gen.sg. *ēas* (from the masc. *a*-stems!) is found, beside *ēan* nom.pl. (from the *n*-stems), which Ælfric appears to prefer.

¹¹ Only in the nom.sg. and Exod 21.28, Med 1.1 10.15 *hnite* nom.acc.pl.

¹² Also Bede 3 14.204 *styðe* (2×) dat.sg. and Alex 118 *stypēo* nom.pl., which appears to be an unusual restructuring from the *ō*-stems on the base form **stypē*. A further *ō*-stem form is OccGl 49.281 *stoðe* (after Hoad, 1978: 178; the *DOEC* has *stuðe*, but in the facsimile Hoad’s reading appears to be correct: see Pulsiano 1996: London, BL, Cotton Vespasian D. vi, fol. 10r) acc.pl.

2.112 The various paradigms of the root nouns can be traced back to a single early PGmc paradigm of the following type:

	Singular	Plural
<i>Nom.</i>	*fōs ¹	*fōtiz
<i>Acc.</i>	*fōtum	*fōtunz
<i>Gen.</i>	*fōtiz	*fōtōom
<i>Dat.</i>	*fōtī	*fōtumiz

¹ *Fōs directly reflects PIE *pōs < *pod-s, cf. Greek πούς. The individual Gmc languages show that an analogical replacement later occurred, with extension of the oblique stem to the nom.sg., with various other adjustments.

2.113 The phonological (or analogical, see §2.112n1) development of the forms cited above would result in a Pre-OE paradigm of the following type:

	Singular	Plural
Nom.	*fōt	*fōti
Acc. ¹	*fōt	*fōti
Gen.	*fōti	*fōtō̃
Dat.	*fōti	*fōtum

Although the majority of forms show a straightforward development into OE, some inflexions require further discussion:

nom.acc.sg.: fem. nouns may have adopted *-u from the *u*-stems, cf. the masc. Gothic noun *fōtus* ‘foot’ and note EWS *studu* acc.sg. Alternatively, one might suggest, see Bammesberger (1990a: 191), that the nom.sg. of all root nouns was replaced by the original acc.sg. form, in which -u (from *-um) would appear except when apocoped after a heavy syllable (Hogg 1992b: §6.20).²

gen.sg.: the predicted development in both masc. and fem. would involve *i*-umlaut of the stem vowel and then apocope of final -i after a heavy syllable. In masc. nouns, however, the gen.sg. is always re-formed on the basis of the *a*-stems. The predicted development is seen in heavy-stemmed fem. nouns, although scattered examples of *bōce* on the basis of the *ō*-stems are to be found, whilst the evidence from short-stemmed nouns is sparse;³

nom.pl.: the development here would be parallel to the gen.sg., cf. above, but note that *i*-umlaut is regularly retained. See §3.126 for late forms such as *fōtas* ‘feet’, *burha* ‘cities’;

gen.pl.: the inflexion here is the regular development of *-ōō̃ with reduction of trimorcity to bimorcity, followed by shortening and lowering of nasalized *-ō̃ > -a (Hogg 1992b: §3.32).⁴ The vowel apparently was still long at the time *Beowulf* was composed, as it contrasts with short -u, *-i under the dictates of Kaluza’s Law, see Kaluza (1896: 120–31) and Fulk (1992: §§170–83), with references.

¹ In both sg. and pl. there is merger with the nom., as elsewhere. However, it is also possible that in the sg. syncretism is achieved by the reverse process, namely the merger of the nom. with the acc., see the discussion of the nom.acc.sg.fem. below.

² It should be noted that in Gothic the fem. root-stems adopt the acc.gen.dat.sg. inflexions of the *i*-stems.

³ The evidence for an unumlauted gen.sg. rests on AntGl 2.860 *hnutehula* ‘nut oil’.

⁴ Instances with gen.pl. *-ena* are a later, more general phenomenon, see §3.127.

2.114 There are few significant forms in early texts, but note CollGl 3.2 *fēurstod* ‘buttress’, with which compare the somewhat later CIGl 1.4892 *durustod* ‘door-post’, both with apocopated *-u*. The dat.pl. form Ch 1510.21 *bōēcum* is more probably a confused spelling than an inverted spelling for **bēcum* with extension of *i*-umlaut.

Nouns: Declensions

I Introduction

3.1 As indicated in chapter 1 and in §2.1, the morphological structure of OE nouns changed considerably during the period, so that their status may be defined by the set of inflexions which are attached to their stems, rather than by the stem type. In this chapter, therefore, a noun will be assigned to a particular declension by virtue of the inflexions which it takes, and the variety of declensions will correspond to the variety of distinct sets of inflexional endings. The question of how many discrete declensions existed in OE is necessarily a theoretical one, and more than one plausible answer is possible. It cannot be determined precisely how native speakers of Old English might have mentally categorized the declensional morphology of nouns in their language, and indeed it is likely that the categories varied by dialect and date within the period. An attempt at a declensional schema, however, no matter how tentative, and even if by its nature incapable of expressing the taxonomic diversity that must have prevailed from century to century and dialect to dialect, demands to be made, since the taxonomy laid out in chapter 2 on largely diachronic principles plainly cannot have served as the basis for the categorization of declensions in the Old English period itself. For example, although *word* ‘word’ may be classified as an *a*-stem neuter and *cynn* ‘race’ as a *ja*-stem neuter on the basis of derivation, they were inflected alike, and it seems most unlikely that in any dialect or period from which records survive an Anglo-Saxon should have regarded them as belonging to different declensional classes. Accordingly, although a single schematization cannot plausibly be made to suffice, it may nonetheless furnish insights into the kinds of general taxonomic principles that must have obtained in the period.

3.2 Three major declensions may be discerned in the synchronic morphology of OE nouns, as follows, where the names are taken from the predominant shape of the nom.acc.pl. inflexion in that declension:¹

- (1) the *as*-declension, of which typical examples are masc. *stān* ‘stone’ and neut. *scīp* ‘ship’, *word* ‘word’;
- (2) the *a*-declension, of which typical examples are *ġifu* ‘gift’, *lār* ‘learning’;
- (3) the *an*-declension, of which typical examples are masc. *ġuma* ‘man’, neut. *ēaġe* ‘eye’ and fem. *tunġe* ‘tongue’.

The first two of these declensions correlate closely with gender, for the *as*-declension comprises masculine and neuter nouns,² whilst the *a*-declension consists only of feminine nouns.

¹ On the rationale behind this taxonomy, see Hogg (1997b).

² It is somewhat clumsy to refer to such neut. nouns as *as*-declension nouns, since they form their nom.acc.pl. with *-u*, *-a* or *-∅*. But since the neuters are otherwise identical to their masc. counterparts, the equation, however imprecise, seems inevitable, see further §3.5.

3.3 There remain some OE nouns which take other sets of inflexions and therefore can be logically assigned to further declensions. The numbers involved are generally small, see for further discussion §3.4. It is most appropriate to group them together under the category of minor declensions, with the following subtypes:¹

- (1) *a*-plurals, which consist principally of original *u*-stems and of which the chief examples are *hand* ‘hand’, *sunu* ‘son’;
- (2) mutation plurals, of which typical examples are *fōt* ‘foot’, *hnutu* ‘nut’;
- (3) a number of small groups of nouns, these groups sometimes being semantically definable. Thus we find: *e*-plurals, which consist of those older *i*-stems which refer to nationalities, for example *Engle* ‘English’, cf. §2.70; kinship terms, for example *mōdor* ‘mother’,² which historically derive from *r*-stems; and *∅*-plurals which originate in historical disyllabic *nd*-stems, for example *bettend* ‘enemy’. This last group may well be both morphologically and semantically definable, since the *nd*-stems are masc. agentive nouns formed from present participles, see §§2.104–6.

¹ To these some writers would add a fifth group of the type *cild* ~ *cildru* ‘child’ ~ ‘children’, all of which are neuter, but these are regarded here as a subtype of the *as*-declension, see §3.53.

² But not *fæder* ‘father’, which has been transferred to the *as*-declension, see §3.68n3.

3.4 The primary criteria for the division into major and minor declensional types are the closely related criteria of open : closed and large : small. That is to say: firstly, the major declensions each constitute an open set to which new items of vocabulary may be freely added, if appropriate, whilst the minor declensions each constitute a closed set, to which new items of vocabulary may not usually be added;¹ secondly, each major declension, as would be expected of an open set, has a large membership, whilst the membership of minor declensions is measurably low.

¹ The possibility of some exceptions, that is to say, of the migration of a few nouns to a closed declension, has to be recognized. For example, Campbell (1977: §628.6) suggests that some place-names of Celtic origin have been assimilated to the declension of root-stems with gen.sg. in *-e*. It should be noted that Campbell's account is perhaps unlikely, see §3.127n3 for discussion. But the point, of course, remains that the minor declensions are plainly not very productive, if they are at all productive, and if any new members have been added to them over time, the additions are very few and plainly exceptional.

3.5 The outline of synchronic declensions for OE given above is closest, perhaps, to that of Quirk and Wrenn (1957: §§25–49), with which it may usefully be compared. The major contrasts at this general level are (i) Quirk and Wrenn analyse the masc. and neut. nouns of the *as*-declension as belonging to separate declensions, although they do make it clear that these nouns are distinguished only in the nom.acc.pl., whilst here they are treated as belonging to the same declension, with the different inflexions of the nom.acc.pl. being determined by whether the stems of these nouns have the property MASCULINE or NEUTER; (ii) they do not take the *e*-plurals above as a separate minor declension; (iii) they classify the minor declensions as 'irregular'.¹ Of other synchronic descriptions in a broadly philological framework,² Mitchell and Robinson (2006: §§22–62) speak of four major declensional types: weak, strong masc. and neut., strong fem., and *u*-declension.³ Pilch (1970: 103–9) has a very different and innovative arrangement, in which there is a principal contrast only between weak and strong declensions, with gender marking particular variations in inflexion, e.g. masc. neut. *-es* vs. fem. *-e* for gen.sg. of strong nouns. Additionally he posits a major declensional split between strong nouns with nom.acc.sg. *-e* and those with *-Ø*. There then follow about five minor declensions, mostly of the usual type but including a *w*-declension equivalent to the historical *wa*-stems, see §§2.27ff.

¹ But they use the term 'irregular' to mean only what was said above about these types, namely that the minor declensions are closed sets and non-productive, and not in the sense that they show non-predictable variation.

² Most such descriptions are in introductory textbooks, and therefore somewhat abbreviated. But their interest lies in their theoretical frameworks.

³ But Mitchell and Robinson generally represent morphophonemic alternations as resulting directly from sound change, rather than as part of some synchronic structure. This is most obvious, perhaps, in their treatment of mutation plurals (2006: §§58–60).

3.6 Amongst generative treatments of OE morphology, by far the fullest treatment is that of K. Wagner (1969). Wagner proposes the following classes: strong, *u*-class, weak, and athematic. Distinctions amongst different types of strong-class nouns are handled either by gender-dependent rules, as with, for example, *stānas* ‘stones’ vs. *scīpu* ‘ships’, or by sub-classes with particular extensions of the stem, notably /j/ and /w/. Close study of Wagner’s work remains highly profitable, despite some theoretical advances since its publication. The analysis of Erdmann (1974), though generative in orientation, shares much with historical, philological approaches, since it begins with rather abstract underlying forms that resemble those reconstructed for WGmc, to which synchronic phonological rules that mostly resemble historical developments like breaking and loss of intervocalic [h] are applied.¹ Thus, the stem classes identified generally correspond to the familiar ones of diachronic approaches. Much other generative work of a later date is not primarily concerned with the status of paradigms, but there are important and stimulating discussions of noun morphology in Kiparsky and O’Neil (1976), Drescher (1978) and, more briefly, Keyser and O’Neil (1985).²

¹ Similar is the approach of Stark (1982: ch. 2) for verbs, though he turns a critical eye upon the adequacy of such a generative approach.

² Other generative treatments are primarily of curiosity value and add little to our knowledge, for example Dürmüller and Utz (1977) and Peinovich (1979), both of which tend to take as their basis for discussion the historical stem classes.

II *as*-declension

3.7 This is the largest and most important of all the OE declensions. The principal sources of its membership are the following historical stem (sub-)classes: *a*-stems (including *ja*- and *wa*-stems) and masc. *i*-stems (except names of nationalities).¹ Nouns of this declension could be either masc., in which event the nom.acc.pl. was *-as*, or neut., in which event that inflexion was either *-u* or *-Ø*.² In this declension, and regardless of gender, nom. and acc. inflexions are never distinguished either in the sg. or the pl. Nevertheless, for reasons of clarity they are indicated separately in the paradigms which follow.³ The falling together of these inflexions was a characteristic found in the earliest period, see further §2.14.

¹ For examples of membership of this and all other major declensions, see the listings of nouns according to stem class in the relevant sections of ch. 2.

² For the most part it is the light-stemmed neuters that have *-u*, whilst heavy-stemmed neuters have $-\emptyset$, cf. §§2.11, 2.15. But the merger of a variety of stem classes into the *as*-declension means that this is not always so, as with, for example, originally heavy *ja*-stems such as *wītu* ‘punishments’. See further the discussion in §3.34. Note also that *-u* varies with *-o* and *-a*, both according to date and dialect, see §3.9.

³ However, references in the text to nom.sg. or nom.pl. always refer equally and without distinction to acc.sg., acc.pl., respectively, unless there is a specific indication to the contrary.

1 Inflexions

3.8 In LWS the set of inflexions which was attached to the stems of *as*-declension nouns was as follows:

	Singular	Plural
Nom.	$-\emptyset$	-as (masc.); -u, -a/ $-\emptyset$ (neut.)
Acc.	$-\emptyset$	-as (masc.); -u, -a/ $-\emptyset$ (neut.)
Gen.	-es	-a
Dat.	-e	-um

3.9 The above set of inflexions, which in LWS is generally stable within the above limits, is inherited from the inflexions of the simple *a*-stems (§§2.11ff.). The most significant late change in inflexion¹ concerns the dat.pl., where forms of the type *-an*, *-on* began to appear very sporadically even in EWS, e.g. CP(H) 163.17 *ramman* ‘rams’, Or 13.6 *beorgan* ‘hills’. But Ælfric shows no significant increase in such forms, and *-um* remains regular alongside very occasional examples like ÆCHom II 26 370.2 *heofenan* (cf. 368.34 *heofenum*). Although the origin of this inflexion may be in part phonological, it seems more likely that the major cause is the spread of the *an*-declension inflexion *-an* to the dat.pl. of *n*-stem nouns and thence its spread to the dat.pl. of all other nouns, see Hogg (1992b: §7.102), also §3.107 below. This change of inflexion is common to all nominal declensions when it occurs, but the general spread of the change seems to be post-Ælfrician.² LWS texts also show occasional examples of gen.pl. *-ana* (*-ena*), esp. in glosses on Aldhelm, e.g. AldV1.4657 *baþana* ‘of baths’, the most frequent examples being of *dagana* (rarely *dagena*) ‘of days’, a situation repeated in Nbr, see §3.10.³ For light-stemmed neut. nouns,⁴ the shape of the nom.pl. is particularly important. In EWS the inflexion was usually *-u*,⁵ but by the time of Ælfric it is subject to variation between *-u* and *-a*, so that, for example, nom.pl. *scīpu*, *scīpa* ‘ships’, *wītu*, *wīta* ‘punishments’ can all be found,⁶ and some late texts have *-o*, presumably as the phonological development of *-u*, see Hogg (1992b: §6.55). The substitution of *-a* appears to be morphological rather than phonological, see Hogg (1997a: 120; 2000: 366) and is probably motivated by the

obscuration of apocope as a phonological process in LWS, see §3.72, Fulk (2010c).

¹ Late texts show a number of variations which testify principally to the merger of unstressed vowels rather than any change of inflexion, for example gen.sg. *-ys* of the type in PsCa(C) 7.24 *bæcys* ‘back’s’ and the rarer variant *-is*, also rare *-as*, cf. the discussion of texts from other dialects in §§3.10–11, and similarly *-es* for nom.pl. *-as*. For references, see Fulk, Bjork and Niles (2009: cxlii n1).

² By the time of texts such as the Salisbury Psalter, however, *-an* or predictable variants of that inflexion have become common, as they also are in late charters. It may be, of course, that Ælfrician texts are, in this respect as in others, graphically conservative in their representation of forms.

³ Note that *dagana* at El 193 is required by the poetic metre, which would be spoilt by *daga*.

⁴ Or their equivalents, see §3.7n2.

⁵ The inflexional forms *-o*, *-a*, which are frequent in more northerly dialects and also very common in LWS texts, for which see below, are relatively infrequent in EWS, though note that Or has *scīpa* ‘ships’ 10x, see Cosijn (1886: §3), Bately (1980: xlv), also the possibly ambiguous Or 29.18 *seara* ‘devices’. Nom.acc.pl. *hēafda* occurs also in EWS (3x).

⁶ Pope (1967–8: 183) notes that *-a* as nom.pl. is identical to the inflexion of fem. nouns of the *a*-declension (the historical *ō*-stems).

3.10 In INbr there are occasional examples of gen.sg. *-as*, presumably due to the coalescence of unstressed vowels, as in LWS, despite Ross (1937: 54), and there are in addition occasional examples of gen.pl. *-ana*. More particularly characteristic of the Nbr inflexions, however, is the quite common use in Li and DurRitGl, but not Ru2, of *-o* for the nom.pl. alongside *-as*, e.g. frequent *hlāfo* ‘loaves’. This is most probably due to the influence of the *an*-declension, although it should be noted that the corresponding neut. form is also *-o*, see below. Even more significant, perhaps, is the frequent occurrence in Li of a zero-inflected dat.sg., e.g. MtGl(Li) 14.8 *disc* ‘dish’, MkGl(Li) 6.4 *ōēðel* ‘country’, alongside expected forms of the type in MtGl(Li) 4.6 *stāne*. This alternation is an early indicator of the loss of the dat.sg. evidenced in early ME texts.^{1,2} In the nom.pl. the inflexion *-o* heavily predominates over *-a*, although it is remarkable that in heavy stems the ratio of *-o* : *-a* : \emptyset is approximately 2 : 1 : 1 (Ross, 1937: 55).³ The variation between *-o* and *-a* is most probably due to late merger of unstressed vowels, but for the failure of apocope in heavy stems, see §§3.50–1.⁴ The inflexions of DurRitGl are similar to those of Li, whilst Ru2 shows variation between *-u* and *-o*. Thus, the principal Nbr inflexions are:

	Singular	Plural
<i>Nom.</i>	\emptyset	<i>-as</i> , <i>-o</i> (masc.); <i>-o</i> , <i>-a</i> / \emptyset (neut.)
<i>Acc.</i>	\emptyset	<i>-as</i> , <i>-o</i> (masc.); <i>-o</i> , <i>-a</i> / \emptyset (neut.)
<i>Gen.</i>	<i>-es</i>	<i>-a</i>
<i>Dat.</i>	<i>-e</i> , \emptyset	<i>-um</i>

¹ The \emptyset -inflection is not found in DurRitGl, but note MkGl(Ru) 13.28 *aldor* ‘prince’, *fičbēom* ‘fig tree’ beside *fičbēome* (4×).

² Other variant forms with *-i*, *-æ* are simply due to variation of unstressed vowels, and the occasional *-o* is surely a Latinism, *pace* Ross (1937: 54–5).

³ In light stems there is just one example in Li of a \emptyset -inflection, namely JnGl 14.15 *bebod* ‘commands’.

⁴ Thus Brunner (1965: §237A5), which seems more plausible than the suggestion by Ross (1937: 55) that *-a* is a borrowing from the *an*-declension, cf. the situation in LWS where such borrowing would have given *-an*.

3.11 The evidence presented by lMerc shows many of the same variations of unstressed vowels as elsewhere and similarly occasional gen.pl. *-ana*. Additionally, there are very occasional examples of nom.pl. in *-a*, equivalent to lNbr *-o*, of which the plainest is MtGl(Ru) 13.39 *riftra* ‘reapers’, and scattered examples of \emptyset dat.sg. The nom.pl. of light-stemmed neuters is similar to that of the sNbr Ru2, i.e. *-u* or *-o*. The later Kt texts do not have forms which differ significantly from LWS ones, and perhaps the most noteworthy unusual form is OccGl 49 11.26 *māgos* ‘kinsmen’.

2 Allomorphic variation

3.12 The usual inflection of the *as*-declension is exemplified by a masc. noun like *stān* ‘stone’, in which the inflexions of §3.8 are added directly to the stem without variation in either stem or inflection, hence LWS:

	Singular	Plural
<i>Nom.</i>	stān	stānas
<i>Acc.</i>	stān	stānas
<i>Gen.</i>	stānes	stāna
<i>Dat.</i>	stāne	stānum

The same situation holds for the other dialects, with appropriate adjustments in inflexional shape. The only distinction between masc. and neut. nouns is that the latter have either *-u* or \emptyset according to a rule of *u*-apocope which is discussed in §§3.50–1, hence *scīpu* ‘ships’, *word* ‘words’.

3.13 There are, however, a great number of allomorphic variations which can occur under a variety of conditions. For convenience and ease of exposition, these variations may be, with one exception, see below, categorized into four groups, although no theoretical significance should be attached to these divisions:

- (i) variations which are the result of earlier sound changes, and in particular the following: restoration of \check{a} ; palatalization; back umlaut; loss of [h]; final devoicing; see §§3.14–31;

- (ii) variations which, although often in part reflecting earlier sound changes, are the result of particular syllabic configurations: nouns with final *-e* in the nom.sg.; nouns with a stem-final geminate; nouns with final *-u* or *-w* in the nom.sg.; nouns with *u*-apocope; see §§3.32–51;
- (iii) nouns which show *-r-* in some or all of their plural and which may be considered double plurals, see §3.52–5.
- (iv) variations in nouns which have, or apparently have, see §3.56–72, a stem which is historically disyllabic; such nouns show particular problems in respect of syncope and apocope.

(a) *Restoration of ǣ*

3.14 In WS a group of nouns which have stem-vowel /æ/ in the nom.sg. retain /æ/ throughout the sg. but have /a/ in the pl., where the inflexion contains a back vowel. This alternation is usually regarded as directly reflecting the historical change of restoration of *a*, see Hogg (1992b: §§5.10–15); see, however, §3.15n3 below. Thus we find a paradigm of the following type (with neut. variants in brackets):

	Singular	Plural
<i>Nom.</i>	bæþ <i>bath</i>	baþas (fatu <i>vessels</i>)
<i>Acc.</i>	bæþ	baþas (fatu)
<i>Gen.</i>	bæþes	baþa
<i>Dat.</i>	bæþe	baþum

Other nouns which decline in the same way include: *dæg* ‘day’, *hwæl* ‘whale’, *pæþ* ‘path’, *stæf* ‘staff’ (all masc.); *bæc* ‘back’, *bæþ* ‘bath’, *blæd* ‘leaf’, *cræt* ‘cart’, *dæl* ‘dale’, *fæc* ‘interval’, *fæt* ‘vessel’, *fnæd*, *fnæs* ‘fringe’, *hæf* ‘sea’, *sæl* ‘hall’,¹ *scræf* ‘cave’, *stæþ* ‘shore’, *swæþ* ‘track’, *træf* ‘tent’, *wæd* ‘water’, *wæl* ‘the slain’ (all neut.).

¹ Cf. *sele*, historically an *i*-stem, and *salor*, an *s*-stem.

3.15 Since the phonologically induced alternation matches directly the morphological alternation SINGULAR ~ PLURAL, it should be expected that the alternation might remain relatively stable, and that is generally the case. In EWS, where the pattern is already well established, there are few deviations, but note Or *staðe* (3×) ‘shore’ dat.sg., 14.31 *-hwælum* dat.pl.¹ In LWS there are equally some scattered examples of extension of either <a> to the sg., i.e., *daðes*, *daðe* gen.dat.sg. or, less often, of <æ> to the pl., i.e. *dæg-as*, *dæga*, *dægum*.^{2,3} The great majority of such forms, however, are to be found in very late texts, particularly charters, and they may simply be indicative of the late merger of /æ/ and /a/ and consequent confusion of the two graphemes, see Hogg (1992b: §§5.215–16). On the other hand,

the general stability and saliency of this alternation may result in the restructuring of other nouns to follow this pattern of alternation. This seems to be the case with WS *stæpe* ‘step’, a former *i*-stem, where the expected sg. is *stepe* against nom.pl. *stapas*, see §2.57&n3. See also §4.22–4 for a discussion of the possibly plainer situation with regard to the alternation of <a> and <æ> in adjectives.

¹ But two of these examples are from the Cotton ms., which is LWS, as is Or 15.16 *hwales* (immediately beside *hwæles*). Yet it is probable that the forms have been copied directly from the EWS exemplar: note that L has *horschwælum*, C *horshwælum*.

² Examples in Ælfric, e.g. ÆCHomII 1.1 113.96 *crætu* ‘chariots’, are rare.

³ An alternative view is expressed in Hogg (1996: 70), namely that a form such as *hwales* shows the expected phonological development and that *hwæles* is analogical. This view is dependent on the validity of an argument that spelling variation between <a> and <æ> may reflect a phonetic lengthening in open syllables.

3.16 The same principles (and types of variation) appear to apply in the other dialects also,¹ but the forms in those dialects which have second fronting (e.g. PsGl(A), Ru1, see Hogg 1992b: §§5.87–92) are significantly different. There the root vowel in the sg. should be *e* and in the pl. either *æ* or *ea*, and hence we find patterns such as *deġ* ~ *dægas*, *fet* ~ *featu*. The choice here between *æ* and *ea* is dependent upon the failure of back umlaut before velar consonants in Angl, see *ibid.*: §5.102–3.

¹ In Kt we find an alternation between /e/ and /a/, e.g. *deġ* ~ *dagas*, as a result of Kentish raising, see Hogg (1992b: §§5.189–91).

3.17 Theoretically, exactly the same principles should apply to instances in which the stem vowel is /æ:/, hence *mæġ* ~ *māgas* ‘kinsman’. It is noticeable, however, that whilst forms of the type *mægas* are quite frequent in EWS, they are absent from LWS texts. This may be a purely phonological problem regarding the differential implementation of the historical sound change in EWS and LWS rather than an indication of extension of /æ:/ throughout the paradigm in EWS but not in LWS. In other dialects, where the stem vowel is /e:/, see Hogg (1992b: §3.25), the issue does not arise.

(b) Palatalization

3.18 The changes induced by historical palatalization (see Hogg 1992b: §§7.15ff.) are of two types: firstly, there can arise a contrast according to inflexion between a palatalized consonant in forms like nom.sg. *dīc* ‘ditch’ against nom.pl. *dīcas*; secondly, where there is variation between a front and a back stem vowel for other reasons, this will then correlate with a variation between a palatalized and an unpalatalized initial consonant, hence (neut.) *ġeat* ‘gate’ nom.sg. vs. *gatu* nom.pl.

3.19 The first type of variation, although presumably widespread, is not directly recoverable from the textual evidence. It would lead to alternations of the type in *dæġ* ~ *dagas* and *dīc* ~ *dīcas*, with differences between the two types in that where the palatalized consonant was originally a stop, palatalization would take place only in the nom.sg., see Hogg (1992b: §7.16). The alternation in *dæġ* and the like is deducible, however, from the fact that *dæi* and *dai* appear for *dæġ* in late texts, but never ***daias*, ***daium*. The alternations in both words, of course, are to be deduced on the basis of evidence from later stages of the language.

3.20 The second type of variation, on the other hand, is often recoverable from the textual evidence, although the recovery is usually ambiguous. Thus, whilst nom.sg. *ġeat* plainly demonstrates palatal diphthongization of the stem vowel /æ/ which must be a consequence of the palatalization of the initial consonant, and nom.pl. *gatu* would appear to suggest an initial velar, it is unclear whether the less frequent *ġeatu*, etc. (not in Ælfric, although occasionally in both EWS and late texts) has extension of /æ/ from the sg., see §3.15 and the discussion of restoration of *ǣ* therein, with consequent palatal diphthongization, or has extension of the palatal consonant from the sg. with diacritical <e>, see Hogg (1992b: §5.50n1). That such forms, although infrequent, are slightly more common than the usual extension of /æ/ may tip the balance in favour of the latter explanation.

(c) *Back umlaut*

3.21 Back umlaut is an historical change whereby short front vowels diphthongized if a back vowel appeared in the following syllable, see Hogg (1992b: §§5.103ff.). This change was subject to considerable dialectal variation, but a broad generalization is that in WS, back umlaut of **/i/* was quite common, but more frequent with *u*-umlaut than *a*-umlaut, and that only *u*-umlaut (rather than *a*-umlaut) of **/e/* was at all common, whilst in Angl both *u*-umlaut and *a*-umlaut were common, especially in later texts, see for full details of the complex variations Hogg (1992b: §§5.103ff.). These inherent variations make the discussion of the morphological context of back umlaut particularly difficult, and they inhibit to some extent the postulation of broad generalizations as to its status.

3.22 In WS one would expect that where the stem vowel was /i/, *u*-umlaut would occur in the dat.pl. and the nom.pl. of neuters, and *a*-umlaut elsewhere in the pl., but if the stem vowel were /e/ then only *u*-umlaut would occur in the nom.pl. of neuters and the dat.pl. of all nouns. There is, of course, a further restriction in WS that there must be just one intervening consonant, which is usually a liquid or a labial, see Hogg (1992b: §5.104(1)). The consequence of these restrictions is that for masc. nouns, examples

with /i/ are practically wanting, and we can consider only examples with stem vowel /e/, of which *wer* ‘man’ is the most frequent and useful example. But forms like *werum* dat.pl. are virtually exceptionless,¹ and it is reasonable to suppose that in WS back umlaut is always levelled away in masc. nouns in which it produced paradigm allomorphy. For neut. nouns, on the other hand, there are frequent examples with original stem vowel /i/, and we should expect nom.pl. forms of the type *cliofu* ‘cliffs’, *sciopu* ‘ships’,² *gebeodu* ‘prayers’, in addition to dat.pl. forms with back umlaut. However, back umlaut is regularly levelled away even in these nouns, and the only neuter noun which shows back umlaut with any frequency in the pl. in WS is *liomu*, *leomu*, etc. ‘limbs’ (found in both CP and ÆCHom). We may suppose, therefore, that in general, any rule of back umlaut has been lost from the phonology of the *as*-declension nouns in WS.

¹ Bede 5 10.412.28 has *weoras* acc.pl., but this is scarcely significant, in view of the Merc origins of the text.

² Or, with merger of *io* and *eo*, see Hogg (1992b: §§5.155ff.), *cleofu*, *sceopu*.

3.23 In Angl dialects, both *u*- and *a*-umlaut occur regularly. In Nbr, consequently, we should expect all forms of the pl. to show back umlaut of the stem vowels /i, e/. However, in NNbr back umlaut is frequently levelled away in masc. nouns, hence usual Li *weras*, etc.,¹ against *weara* gen.pl. (2× in Li). In neuters, however, back umlaut is usual in the pl., e.g. *ge-*, *gibeodo* ‘prayers’ (Li 2×, DurRitGl 2×), *liomana* ‘limbs’ gen.pl. (Li 4×, DurRitGl 2×), *sciop(p)o* ‘ships’ nom.pl. (Li 5×) against *scipo* (1×). The proper description of this distinction between masc. and neut. nouns, which doubtless results from the different inflexions of the nom.pl., is of some theoretical interest, since we might suppose that back umlaut has been lost from the synchronic phonology of the masc. nouns but retained for neut. nouns. There appear to be some traces of a dialectal distinction between NNbr and SNbr, for in Ru2 we find *weoras*, *sciopu*, etc., throughout the plural, with both *u*- and *a*-umlaut.² It is perhaps noteworthy that the situation in Ru2 is quite close to that of Merc, and certainly closer to that than it is to the NNbr position.³ In the WMerc dialect represented by PsGl(A), back umlaut is regular, and hence alternations of the types *wer* ~ *weoras*, *scip* ~ *sceopu* are normal.⁴ On the other hand, Ru1 shows both *weoras* and *weras*, although neuters appear to show only unumlauted forms, e.g. *gebeodum*, in the pl. The evidence of Kt is too scant to allow clear conclusions to be drawn. There appears to be variation, but note examples such as Ch 1510 *gewriota* ‘writings’ gen.pl., OccGl 49.21 *weogas* ‘ways’, contrasting with OccGl 49.415 *gewita* ‘witnesses’, 994 *cuidas* ‘sayings’.

¹ On variation of the stem vowel as in *wæras*, etc., see Hogg (1992b: §5.179).

² On variation of the diphthong, e.g. Ru2 *wearas*, see Hogg (1992b: §5.44n1).

³ On the comparison between NNbr and SNbr, see Lindelöf (1901: §88).

⁴ *Weagas* (3×), *weogum* (1×) may be Kenticisms, see Hogg (1992b: §5.105n6) and Ball (1970: 465).

3.24 Overall, the dialect picture is one of the general loss of any synchronic rule of back umlaut in WS, against its retention in the allomorphy of Merc, whilst Nbr occupies a medial and theoretically somewhat complex position. In the context of this dialect variation it is probably important to note that most generative analyses of back mutation in this declension restrict themselves to a single dialect, as, for example, in Dresher (1978), which deals only with WMerc.

(d) *Loss of [h]*

3.25 The historical source of the variations discussed below is the loss of [h] between voiced segments, see Hogg (1992b: §§7.45–51). Loss of [h] (earlier [x]) could occur in two types of words: (i) those with [h] occurring after a vowel; (ii) those with [h] occurring after a liquid consonant. In both types, [x] would be retained word-finally in the nom.sg., but it would be lenited to [h] and lost between voiced segments in inflected forms. The loss of [h] would lead to further changes in both types, and the resultant paradigms in LWS are of the following types (see below for further discussion):¹

Singular

<i>Nom.</i>	scōh <i>shoe</i>	mēarh <i>horse</i>
<i>Acc.</i>	scōh	mēarh
<i>Gen.</i>	scōs	mēares
<i>Dat.</i>	scō	mēare

Plural

<i>Nom.</i>	scōs	mēaras
<i>Acc.</i>	scōs	mēaras
<i>Gen.</i>	scōna ²	mēara
<i>Dat.</i>	scōm	mēarum

Other nouns which decline like *scōh* include: masc.: *eoh* ‘horse’, *flēah* ‘flea’,³ *hōh* ‘heel’, *lēah* ‘open land’ (see §3.36); neut.: *feoh* ‘money’, *flēah* ‘albugo’ (cf. *flēa*, etc., of the *an*-declension, see n2), *pleoh* ‘danger’, *slōh* ‘mire’ (rarely masc., fem.), *þēoh* ‘thigh’. In *eoh* and other nouns with a short diphthong in the nom.sg., compensatory lengthening perhaps takes place when [h] is lost, so that we find nom.pl. *ēos*, etc.⁴ Other nouns which decline like *mearh* include: masc.: *ealh* ‘temple’, *fearh* ‘pig’, *healh* ‘nook’, *horh* ‘rheum’ (also neut.), *sealh* ‘willow’, *seolh* ‘seal’, *wealh* ‘foreigner’; neut.: *feorh* ‘life’, *holh* ‘hollow’. On compensatory lengthening in this type, see §3.28 and references therein.

¹ See §§3.26, 3.28n2 on the nom.pl. of neut. nouns of this type.

² Found at GDPref and 3 20.221.22 and also RegCGI 2.272.

³ Of uncertain gender. The form co-exists with *flēa*, of the *an*-declension. It is probable that the latter is the result of restructuring, which eliminates the allomorphic variation and aligns the noun with a regular type.

⁴ See Hogg (1992b: §§5.124ff.). However, whether the long vowel in a form such as *ēos* is due to compensatory lengthening rather than vowel contraction is debatable, see §3.26n1. Compensatory lengthening serves the purpose of preserving a heavy root syllable throughout the paradigm of a word such as *mearb*, but it is unmotivated by any such consideration in a form such as **eo-as* < **eohas*, since the initial syllable is etymologically light. Moreover, non-contraction in poetic metre demands the assumption of a light first syllable in decontracted *ēos* and the like, see Fulk (1992: §101), and cf. Dietz (1970).

3.26 As regards the type exemplified by *scōh*, most WS forms can be accounted for by assuming that loss of [h] is followed by vowel contraction, as a result of which an original short vowel or diphthong was lengthened.^{1,2} This will account for all the forms of *scōh* in §3.25 except gen.pl. *scōna*, where the expected form would be of the type **scō*. Such forms do not occur,³ and a new gen.pl. from the *an*-declension has been created, presumably to avoid Ø-inflexion in this case. For the neuters, plural forms are generally rare, but note *hēoh* ‘thighs’ against *hēona* gen.pl., *hēon* dat.pl. Since it would be expected that loss of intervocalic /h/ would occur earlier than apocope, see Hogg (1992b: §7.51),⁴ *hēoh* must represent a reintroduction of /h/ to make the nom.sg. and pl. identical, as is usually the case in heavy-stemmed neuters of this declension, see also §3.28n2. Finally, the stem variations seen in this paradigm can sometimes interact with the variations induced by final devoicing, see the discussion in §3.31.

¹ This formulation differs somewhat from the account given in Hogg (1992b: §§5.132–4), whereby the loss of [h] itself causes lengthening, and the unstressed vowel is then lost in hiatus. This view depends upon the assumption that [h] could have belonged to the first syllable in a form like **feohes*, see *ibid.*: §2.81, because if it belonged to the second syllable, its loss should have gone uncompensated. (To the idea that *h* might actually have been ambisyllabic under such circumstances, cf. McCully, 1992: 119–21, Fulk, 1997.) Cf. §3.25n4. Putting *h* into the first syllable of **feohes* also undercuts the rationale for its loss, since the complementary distribution of [h] and [x] is such that the former occurs in syllable onsets only, the latter in codas, see Opalińska (2004: 236). Describing the environments in which [h] appears would otherwise require a certain degree of complexity, see e.g. J.M. Anderson (2001: 206). Moreover, contracted forms in verse with an original short root vowel or diphthong, when metrically decontracted, never demand scansion with a lengthened vowel; see Fulk (1992: §101) on the implications of this.

² Cf. a similar generative explanation in Kiparsky and O’Neil (1976: 534–7), who also argue convincingly against a very different analysis in Keyser (1975); see also K.H. Wagner (1969: 250); but see §3.25n4.

³ PPs 48.5 *hōa* ‘of heels’, although WS, is an Angl type (PPs appears originally to have been composed in an Angl dialect), see further §3.27.

⁴ The evidence, however, is debatable, as there are reasons to believe that the lenition of /x/ was contemporary with Anglian smoothing, which in turn appears to have followed the apocope of high vowels, see Fulk (1992: §§398, 402).

3.27 In Angl the situation is somewhat different, for there, especially in Nbr, the hiatus may be unresolved, since in more northerly dialects inflexional juncture appears to inhibit such resolution, see Hogg (1992b: §5.147). Hence in Li all forms show retention of the inflexional vowel, e.g. LkGl(Li) 15.22 *scōeas*,¹ and similarly MkGl(Ru) 1.7 *gescōas*. In lMerc similar forms are found, e.g. Ru1 *scōas* (2×).² Theoretically, this is of some interest. Within the framework of lexical phonology, or any related theory which does not accept the existence of boundary segments,³ the status of hiatus resolution becomes difficult. In LWS, hiatus resolution can be viewed as post-cyclical (applying in all environments), but in Angl the failure of resolution before an inflexion implies that the rule is cyclical. Whilst the exact status of hiatus resolution as a lexical rule remains unclear, it is nevertheless clear that forms like *scōas* are not merely analogical re-formations.

¹ With <oe> for <eo>. Variant forms such as acc.pl. *scōea* suggest an alternative neut. paradigm, see §3.10.

² Note that Li has strong forms of the gen.pl., namely MkGl 1.7 *scōe*, LkGl 3.16 *scōea*.

³ A very full, advanced treatment is S. Anderson (1992), whilst Kenstowicz (1994: esp. ch.5) provides an excellent introduction. Kenstowicz (1994: 233–4) also deals with a problem in PDE not unrelated to the present OE problem.

3.28 For the type exemplified by *mearb* there are no significant variations from the paradigm presented in §3.25.^{1,2} The length of the root vowel or diphthong, however, is difficult to ascertain, and it is unclear whether the length is determined morphologically or phonologically; for discussion of the issues involved, see Hogg (1992b: §§5.124, 127). It is plain, however, that both lengthened and unlengthened forms occurred.

¹ Maldon 189 *mear* without final *-h* is an isolated example, which may well be an error for *mearg* (on which see §3.31), see Scragg (1981: 79).

² But the neut. nouns retain final *-h* in the nom.pl., e.g. *feorb* ‘people’, which parallels the re-formation of *þēoh*, see §3.26.

3.29 The morphology of several nouns whose stem ends in *-h* is made more complex by a change in Gmc whereby the sequence */y̆w/, with */y̆/ usually due to Verner’s Law, had simplified to */w/, but could also simplify to */y̆/, see Hogg (1992b: §4.9(3)) for details. Therefore, alongside *holh* ‘hollow’, *horh* ‘rheum’, both nom.sg. and with */x/ without Verner’s Law, inflected forms with *-w-* occurred, thus **holwes*,¹ *horwes*, *horwe*. These could then co-occur with forms with *-g-*, e.g. PsCa(F,G) 7.5 *horgum* dat.pl.²

But any alternations of the type *h ~ w* might be viewed as synchronically suppletive, and hence we find restructuring in the type of paradigm presented by *meaŕh*,³ and forms such as Lch II *hoŕes*, *hoŕas*.

¹ Inferred from ME *holwe* and PDE *hollow*, though these could reflect the stem **holg-*.

² Note ApT 14.6 *horhgum* dat.pl.

³ For occasional spellings of words such as *meaŕh* with final *-g*, i.e. *meaŕg*, see §3.31.

(e) Devoicing

3.30 Most alternations induced by the historical changes of voicing and devoicing, see Hogg (1992b: §§7.54–68), result only in low-level allophonic variations of the type exemplified by *wulf* [wulf] ~ *wulfas* [wulvas]. However, the final devoicing of the voiced velar fricative /ɣ/ has some morphological consequence, although this is mainly to be seen only in LWS texts; see *ibid.*: §7.63 for some details of the different expressions of this devoicing in other dialects.

3.31 In LWS, words such as *bēah* ‘ring’ (< *bēag*, and so for other nouns here), *beorh* ‘hill’, *plōh* ‘plough’, which show final devoicing, retain the voiced velar fricative in inflected forms, e.g. *bēagas* nom.pl., *beorge* dat.sg., *plōges* gen.sg. This sub-phonemic alternation could lead to the interpretation of <g> and <h> as freely varying spellings of a single velar fricative phoneme. Hence we also find occasional spellings in which <h> substitutes for [ɣ], e.g. *dahum* for *dagum* ‘day’ dat.pl., see Hogg (1992b: §7.64). Similarly, occasional examples of <g> for <h>, as in Ch 385 341 *lēage* ‘open land’, also poetic Wan 92 *meaŕg* ‘horse’, are best viewed as graphic substitutions. On the difficulties that attend the interpretation of spellings with <h> for <g> and <g> for <h>, see Fulk (2002).

(f) Nominative singular in *-e*

3.32 A variety of historical developments contribute to a group of *as*-declension nouns which appear to have an inflexional *-e* in the nom.sg. None of these nouns are originally simple *a*-stem nouns which constitute the core group of *as*-declension nouns. Rather, they come from the following three principal sources: (i) originally heavy-stemmed *ja*-stems such as masc. *ende* ‘end’, neut. *wīte* ‘punishment; (ii) originally light-stemmed *i*-stems such as masc. *wīne* ‘friend’, neut. *spere* ‘spear’; (iii) light-stemmed *ja*-stems with originally stem-final *-r*, e.g. *here* army. These types contrast with originally light-stemmed *ja*-stems such as *secġ* ‘man’, *cynn* ‘race’ and originally heavy-stemmed *i*-stems such as *dāel* ‘part’, *flāsc* ‘flesh’, which regularly pattern like masc. *stān* or neut. *word*, according to their gender.¹ From a synchronic

point of view, however, a rather different three-way division is more plausible: (i) a type represented by *ende*, *wine* and *spere*;² (ii) a type represented by *wīte*; and (iii) a type represented by *here*. These three types are discussed in order below.

¹ But see §3.34 for discussion of the nom.pl. of a neut. such as *cynn*.

² Also to be included here are a few trisyllabic nouns: *byrele* ‘cup bearer’, *eowode* ‘flock’ (of variable gender), *hemeþe* ‘shirt’ (neut.), *merece* ‘wild celery’, *sīþe* ‘scythe’, where gemination seems to have been lost in unstressed position, cf. with *hemeþe* Lat *camisia*. *Byrele* can also be a fem. *n*-stem, doubtless due to the nom.sg. *-e*.

3.33 The type of noun represented by *ende*, *wine*, *spere* patterns, according to gender, exactly as other *as*-nouns, except in the nom.acc.sg., where it is characterized by final *-e*. It would be possible to analyse these nouns as having a paradigm separate from that for other *as*-nouns, which would be distinguished from them only by virtue of the nom.sg. inflexion *-e*, but such an analysis is rarely found.¹ It seems more economical to assume that this type consists of disyllabic stems in which *-e* forms the second syllable of the stem.^{2,3} Corroboration of this analysis is to be derived from compounds and quasi-compounds, in which words of this type retain final *-e* of the first constituent, e.g. *sperenið* ‘battle’, *sperelēas* ‘without a spearhead’.

¹ See, however, Mitchell and Robinson (2006: §45) for remarks which appear to support such an analysis; also compare Pilch (1970) and the comments in §3.5 above.

² The remainder of the paradigm can then be derived by means of a synchronic rule which deletes unstressed */e/* before a further vowel, e.g. */ende+as/* → */endas/* = *endas*, */spere+u/* → */speru/* = *speru*. This synchronic rule can be seen as related to the historical sound change by which unstressed */e/* is lost before another vowel, see Hogg (1992b: §§5.150ff.). This sound change is then further developed in IOE and eME, see Luick (1914–40: §§451–2), Minkova (1991: 155–6). Broadly speaking, this type of analysis is the kind adopted by most generative phonologists, although the stem-final vowel is often assumed to be underlying */j/* or */i/*. This is in order to account for *i*-umlauted vowels in the initial syllable, which seems to us unnecessary anywhere in OE noun morphology, including mutation plurals, see §§3.122–7. Keyser and O’Neil (1985: 50–1) assume *wine* to contain stem-final */e/*, in contrast to */i/* elsewhere, which is somewhat odd. K.H. Wagner (1969) and Kiparsky and O’Neil (1976) assign a similar underlying structure to the type represented by *cynn*, but this is rejected by Keyser and O’Neil (1985).

³ It should be noted that in n2 above and throughout this work we have silently amended the frequent generative use of ‘*yl*’ for the palatal approximant */j/* in accord with IPA principles. The persistent use of ‘*yl*’ for */j/* is to be deplored and avoided in the study of OE, though it remains standard in connexion with PIE.

3.34 The type of noun represented by *wīte* has one individuating characteristic, namely nom.pl. in *-u*, e.g. *wītu* ‘punishments’.¹ Given that apocope of final *-u* normally occurs after a heavy monosyllable, see Hogg (1992b:

§6.20), this type represents a surface violation of apocope.² Like the nouns discussed in §3.33, these retain final *-e* when they are the initial constituents of compounds and quasi-compounds, e.g. *wītehūs* ‘torture chamber’, *wīteleast* ‘immunity from punishment’. The paradigm of this type contrasts clearly with original light *ja*-stem neuters like *cynn* ‘race’, in which the nom.pl. is *cynn* with apocope. The most probable explanation of this form is that these light stems were restructured as *as*-declension nouns with a monosyllabic stem ending in a geminate, and that therefore apocope would operate to delete inflexional *-u* in the nom.pl.³

¹ Other examples of this type are given in §2.20.

² However, in a generative framework it might be assumed that there existed a synchronic rule of apocope which was ordered before the */e/*-deletion rule discussed in §3.33. The synchronic derivation of *wītu* would then be as follows, where the output is the actual OE form: */wīte+u/* → */wīte+u/* (apocope fails) → */wītu/* (*/e/*-deletion).

³ Cf. the remarks in Hogg (1992b: §6.25), pertaining to diachronic developments, which we believe to be irrelevant in the present context of synchronic grammar.

3.35 Forms of all the types of noun discussed in §§3.33–4 are almost entirely regular in all dialects, subject only to the types of inflexional variation discussed in §§3.8–11. The only important exception to this generalization appears to be NNbr (Li, DurRitGl) *rīc* ‘kingdom’, which as an historical heavy *ja*-stem should have been expected to pattern exactly like *wīte* (as it does in all other texts and dialects, with insignificant exceptions). But in these two texts the nom.sg. is always *rīc*. Since there is a pl. form LkGl(Li) 4.5 *rīcu*,¹ it would be difficult to argue that the noun has been totally re-formed as a heavy monosyllable, and the status of the word in NNbr remains obscure.

¹ Alongside MtGl(Li) 4.8 *rīcas*, although this masc.pl. is scarcely relevant to the present discussion, since in Li the noun is otherwise neut.

3.36 The third type of noun to be discussed here is principally represented by *here* ‘army’; for other, structurally similar nouns see further §3.37. As described in §§2.19, 2.24b, *here* originally has */j/* before an inflexional vowel, so that we find, for example, *here* ~ *herġas*. But even in EWS, forms with *-ġ-* are in a clear minority, and Or consistently has forms without *-ġ-*, thus giving a paradigm of the type *here* ~ *heras*, which is identical to that of *wine*, see §3.33. In LWS also the type *here* ~ *heras* predominates even more heavily.¹ The development of the new type without */j/* appears to signal a restructuring such that *here* is simply aligned with all other nouns of the same type as *wine*.^{2,3} This change in the structure of *here* is directly relevant to the absence of *i*-umlaut in the synchronic phonology of OE

nouns, cf. §3.33n2. Where /j/ is retained before an inflexional vowel, in WS an epenthetic vowel may be introduced before the /j/, e.g. *heriǵas* ‘armies’, see for further details Hogg (1992b: §§6.43–4). For similar Nbr spellings but from a different source, see *ibid.*: §§6.35–6.

¹ Not, however, exclusively, for there continue to be mainly isolated examples of the *herǵas* type throughout the period, even in WS.

² See further Keyser and O’Neil (1985: 55). On the other hand, the older type with /j/ might, in a generative approach consonant with the analysis of *bearu* offered in §3.42n2, suggest that the underlying form of the stem was /herj/, with /j/ vocalized to /i/ finally after /r/ and subsequently lowered to /e/. This would parallel historical developments in, e.g., the imper.sg. of weak verbs of class I, see §6.82. Cf. §§2.23ff.

³ However, it is surely anachronistic to suggest, as does Brunner (1965: §246A4), that the restructuring is on the basis of the *i*-stems, since it is most probable that the *i*-stems had all been restructured (as members of the *as*-declension, or perhaps, if very early, of the older *a*-stem class) prior to the development in *here* discussed above.

3.37 There are no other nouns exactly like *here*, but the compound *durhere* ‘folding door’ and the Lat loan *cāsere* ‘emperor’ should be noted, together with a large number of examples with the agentive suffix *-ere*, e.g. *bæcere* ‘baker’, see further §2.20. It is noteworthy that none of these polysyllabic nouns ever shows pre-inflexional /j/,¹ and the early restructuring of these nouns, which may have been connected with lack of stress, quite probably led to the restructuring of *here*.

¹ By comparison, there are no attested compounds in *here-* before a second constituent with a vocalic initial, where, etymologically, *herǵ-* might be expected.

3.38 In Nbr the situation is somewhat different, for in all texts forms of *here* indicating the presence of /j/ are regular in the pl., e.g. *herǵum* dat.pl., and in the sg. similar forms are more common than occasional forms without such indication, the only exception being constant dat.sg. *here* in Li.¹ For Merc the situation in Ru1 is similar, but PsGl(A) offers no evidence. It is perhaps noteworthy that these northern dialects are in this respect apparently more conservative than WS.

¹ Ru2, on the other hand, always has forms with *-ǵ-*, see Lindelöf (1901: 104).

(g) *Geminate consonants*

3.39 The primary source of stem-final geminate consonants in the *as*-declension is originally light-stemmed *ja*-stems such as *hyll* ‘hill’ (masc.) and *cynn* ‘race’ (neut.), see §§2.19–20 and, for other sources, §3.40. Originally, these nouns should have had an ungeminated final consonant in the nom.sg., e.g. **hyle*, and a geminated consonant in the acc.sg., e.g. *hyll*. But the two forms appear to have fallen together by the time of

Pre-OE, with the geminate consonant being generalized throughout the paradigm, see §2.23. But later, by a process of degemination, an historical sound change which appears to have begun to be implemented by the time of EWS, see Hogg (1992b: §§7.80–1), gradually becoming expressed more frequently through the period, final geminate consonants would have been shortened, so that there would be an alternation between a single word-final consonant in the nom.sg., e.g. *hyl*, *cyn*, and a geminate consonant in inflected forms, e.g. *hylles*, *cynnes*.¹ This alternation is not always evidenced in LWS texts, so that, for example, *cyn* is found just once in *ÆCHom*, at II 144.205, and not at all in *ÆLS*, although occasionally in other *Ælfrician* texts, though this is more probably due to orthographic convention than to failure of the change, or levelling away of degemination, cf. *ibid.*: §7.81.² It is noticeable that in Nbr the geminate consonants are regularly retained, although whether this is orthographic, as suggested by Campbell (1977: §66n4), or phonological seems impossible to determine.

¹ Such alternation does not occur in nouns in which the geminate is subject to further change, as in the type exemplified by *secġ* ‘man’. This type patterns exactly as *stān*.

² The retention of an orthographic geminate seems to be particularly characteristic of *Ælfrician* texts, and it may therefore be a further indication of graphic conservatism in these texts. On the particular conservatism of *Ælfrician* texts, see Hogg (1997b).

3.40 When a noun reflects a form bearing one of the WGmc suffixes **-innja-* (**-unnja-*), **-attja-* (**-ittja-*), then the same alternations as in §3.39 might have been expected. But in these nouns, of which typical examples are *fæsten* ‘fast’, *fæsten* ‘fortress’, *wēsten* ‘desert’, *bærnet* ‘arson’, *hēowet* ‘slavery’,¹ see for further examples §2.21, not only is there degemination in the nom.sg., but in WS this process is increasingly extended to inflected cases also, hence gen.sg. *fæstenes*, etc. It is most probable that this extension of degemination throughout the plural is a phonological event, whereby the simplification occurs firstly in unstressed syllables, rather than a morphological levelling, cf. §3.62. The nom.pl. of these mainly neut. nouns is always in *-u*, which would not be expected after a heavy syllable, as in *wēstennu* ‘deserts’, but would be regular if degemination had occurred, e.g. *wēstenu*, see further §3.62.

¹ The suffix *-ett* interchanges with *-ot*, see Kastovsky (1992: 359–60), which is ungeminated and whose vowel can then be syncopeated.

3.41 A particularly unusual development occurs with a small number of original light *i*-stems, in particular *hyse* ‘warrior’. Here, alongside constant nom.sg. *hyse* we find inflected forms like nom.pl. *hyssas*.¹ It is difficult to provide a coherent account of this alternation, cf. Hogg (1979: 72–3), and it may simply be that rival paradigms have developed. Other nouns which

show similar developments, but particularly the existence of rival paradigms, include *dyne*, *dyn(n)* ‘din’,² *ile*, *ill*³ ‘sole of foot’, *mete*, *mett* ‘food’,⁴ *ofdele* ‘slope’.⁵

¹ Mald 123 has *hysas* in a metrically ambiguous position, but this is alongside *hysas* (2×) in verses in which the geminate is required by the metre.

² Both *dyn* and *dynn* occur alongside each other uniquely in MSol. For *gedyne* see §2.64n1, also for *gewill* ‘will’.

³ At CorpGl 400 glossing *callos* alongside *weorras*.

⁴ But *mett* is only Nbr, cf. §3.39.

⁵ LkGl(Li) 19.37 *æfdæll*, Ru *æfdelle* dat.sg., from which **ofdell* nom.sg. might be supposed.

(h) *Nominative singular in -u*

3.42 Nouns of this type are historically old *wa*-stems with root-final consonants such as *bearu* ‘grove’ (masc.), *searu* ‘device’ (neut.), see §2.28. The masc. nouns all show an alternation between *-u* in the nom.sg. and *-w-* in all inflected forms, e.g. *bearu* ~ *bearwas*, whilst the neuters all have *-u* in the nom.pl. also, e.g. *searu* ~ *searu*. It seems most probable that this type has been subject to synchronic restructuring, in which the stem is best analysed as containing final *-w*, e.g. *bearw-*.^{1,2} Interestingly, these nouns also show in WS the introduction of epenthetic *-u-*, e.g. *beaduwe* ‘battle’ dat.sg. parallel to the type *herigas* discussed in §3.36.

¹ It would be possible, therefore, although it does not seem to us necessary, to derive the root diphthong by a synchronic rule of breaking, cf. §2.31(1). This is normally the type of analysis favoured by generative studies, e.g. K.H. Wagner (1969: 253), Kiparsky and O’Neil (1976: 548). In other respects the analysis presented here is very similar to such generative analyses, see also Keyser and O’Neil (1985: 51–2).

² In a generative approach similar to that offered for *here* ~ *her(i)gas* in §3.36n2, two synchronic rules might then be assumed to apply to such nouns. The first of these will be apocope of final *-u* after a heavy stem, which will affect the nom.pl. of neuters, e.g. /sæ̃arwu/ → /sæ̃arw/, see further §3.50&n3. (It should be noted that such forms cannot be derived by assuming, rather than apocope, a rule which deletes /w/ before /u/. It would then be impossible to account for constant dat.pl. forms of the type *searwum*, see §2.31(2).) It should be noted that this is a significant shift from the historical situation, where **saru* is the expected nom.pl. form, see §2.31(2). (Compare with this form the older type represented in CorpGl 88 *sarwo* nom.sg. (glossing Lat *adventio*), with *-w-* introduced from the oblique cases but without a diphthong.) The second rule applying to these nouns will vocalize /w/ finally after a consonant, hence /bæ̃arw, sæ̃arw/ → /bæ̃aru, sæ̃aru/.

(i) *Nominative singular in -w*

3.43 There is a group of *as*-declension nouns which differ from the type discussed in §3.42 in that although they are old *wa*-stems, their root ends in a vowel or a diphthong, e.g. *snāw* ‘snow’, *þēow* ‘servant’ (masc.), *hrāw*

‘body’, *cnēow* ‘knee’ (neut.), see §2.28. In all these nouns final */w/ would have vocalized to /u/ and then either would have been lost after a long vowel or diphthong or would have formed a diphthong with a preceding short vowel, as in *strēa(w)* ‘straw’ < **strau* < **strawaz*, see §2.31 for details. It is helpful in the discussion of these forms to distinguish between those nouns which have a root monophthong and those which have a root diphthong (from whatever source). The former are discussed in §3.44, the latter in §§3.45–8.

3.44 In monophthongal nouns of this type, the expected paradigm should show a vowel-final nom.sg., e.g. *snā* with *-w* preceding the inflexion elsewhere except perhaps the dat.pl.¹ In fact, except where the root vowel is *-ī-*, see below, the nom.sg. also shows *-w*, i.e. *snāw*, etc. If this *-w* is phonologically genuine, then this would represent a restructuring of this type to eliminate allomorphy, and the noun would pattern exactly as *stān*. On the other hand, if *-w* is purely an orthographic analogy, see Hogg (1992b: §§7.69ff.), then these nouns would pattern very much like the type exemplified by *bearu*, see §3.42.² The major exception to the above situation occurs with nouns having the root vowel /i:/, e.g. *Tīw* *Tiw*, for these nouns have an alternative nom.sg. of the type *Tīg*, so EpGl, ErfGl 767, CorpGl 1681 *briig* ~ *brīw* ‘porridge’, CorpGl 986 *gīg* ~ ClGl2 5 *gīw* ‘vulture’, EpGl, ErfGl 1015, CorpGl 2021 *slī* ~ *slīw* ‘tench’. This alternation can then affect the parallel *ja*-stem *glīg* ~ *glīw* ‘mirth’.³ The development of these types is also connected with developments in Gmc, see further Hogg (1992b: §§3.18, 4.9). From the morphological point of view, however, it is plain that all the variations lead to an elimination of allomorphy in the paradigm.

¹ There appear to be no examples of nom.pl. of neut. nouns of this type. The late form *strēwu* may show late monophthongization, see Hogg (1992b: §5.212&n2).

² Exactly how the paradigm would be generated synchronically in that event remains, however, problematic, for in order to derive nom.sg. /sna:/ it is necessary to find some method of deleting the stem-final /w/ occurring elsewhere in the paradigm. Presumably this is best achieved by assuming that apocope applies equally to /w/ as to /u/; for details of apocope and some problems that this might cause, see §§3.50–1.

³ The alternation EpGl, ErfGl 1005, CorpGl 1972 *īuu* ~ MRune 35 *ēoh* ‘yew’ is due rather to the combined effects of Verner’s Law and the alternative developments of PGmc */ɣw/ in PGmc **īxwaz*, see Hogg (1992b: §4.9(3)).

3.45 Nouns which had a root-final diphthong in Gmc (i.e. before the suffix *-w-*), e.g. *bēow* ‘barley’, *dēaw* ‘dew’, *þēaw* ‘custom’, see further §2.28, all share the paradigm of *stān*, with *-w* reintroduced to the nom.sg.,¹ although the nom.pl. of neuters (like *bēow*, see §2.28n3) is not evidenced. Other nouns which had developed a root-final diphthong by the phonemicization of the sequence root vowel plus suffix *-w-* should have done so

only in the nom.&acc.sg., though final *-w* was often restored in these cases on the basis of analogy to the inflected cases, see Hogg (1992b: §3.19). In the inflected cases, later developments should either have caused breaking of /e/ before /w/² or shown failure of first fronting before /w/, see *ibid.*: §§5.22, 5.13 respectively, hence giving paradigms of the following types:³

	Masculine	Neuter	
Singular			
<i>Nom.</i>	þēow <i>servant</i>	cnēow <i>knee</i>	strēaw <i>straw</i>
<i>Acc.</i>	þēow	cnēow	strēaw <i>straw</i>
<i>Gen.</i>	þeowes	*cneowes	*strawes
<i>Dat.</i>	þeowe	cneowe	*strawe
Plural			
<i>Nom.</i>	þeowas	cneowu	*strawu
<i>Acc.</i>	þeowas	cneowu	*strawu
<i>Gen.</i>	þeowa	cneowa	*strawa
<i>Dat.</i>	þeowum	cneowum	*strawum

Both these types of paradigm, i.e. those for nouns with the Gmc root vowel */e/ and those for nouns with the Gmc root vowel */a/, are subject to restructuring, as discussed in §§3.46–8.

¹ Except CollGl 12.83 *sēa* ‘juice’.

² But for reasons to doubt that there ever was breaking of /e/ before /w/, see Fulk (1992: §162n2). Note the parallel failure of breaking of /æ/ before /w/ (which occurs only in the sequence /æwi/, see Hogg (1992b: §5.20). If there was no such breaking, the diphthong in these cases should be regarded as analogical, and therefore long. That is, there may never have existed a form like *cneowum* with a short diphthong, rather, only *cnewum* (as at HomS 19 (Schaefer) 189) later replaced by *cnēowum*.

³ In the paradigms below we have assumed the reintroduction of *-w* finally, as in other nouns of this type, see further below. No reflex of a masculine noun with Gmc */a/ before the stem formative is attested in OE. For *strēaw* there are no plural forms extant.

3.46 In WS, nouns with original */e/ normally show the paradigm in §3.45, including the reintroduction of *-w*, and forms without *-w* are relatively infrequent, even in EWS.¹ However, the length of the stem-vowel in inflected forms is variable. For both EWS and LWS as exemplified by Ælfric, the regular form of the nom.pl.neut. shows *-u*, e.g. *cneowu*, *treowu*, which suggests a light stem, although some other texts, for example WSCp, have many forms without *-u*, suggesting a heavy stem, i.e. *cnēow*. It seems at least plausible that the forms without *-u* are newer, showing a simplification of the paradigm.² This analysis is corroborated by the scansion of such words in poetry, since it is only in the Alfredian Met and the seemingly

late Jud that lengthening can be confirmed by the metre.³ Outside of verse, the normal situation in WS is that orthographically, at least, the paradigm of these nouns is unvarying and exactly like that of nouns like *bēow* discussed in §3.45. Other nouns which pattern like *þēow* are *hlēow* ‘protection’,⁴ *trēow* ‘tree’, *ancleow* ‘ankle’,⁵ and *lāreow* ‘teacher’, *lätteow* ‘leader’, compounds of *þēow*.⁶

¹ Thus, *trēo* ‘tree’ *cnēo* ‘knee’ are in WS prose relatively frequent only in Bede. The situation is somewhat different in the poetry, where diphthong-final forms are frequent, see also the comments immediately following. In Beo, however, names in *-þēo(w)*, inflected and uninflected, are spelt without *w* about as frequently as with it, and the manuscript perhaps reads <þeo> for the simplex at Beo 2223, see Fulk, Bjork and Niles (2009: 76). Otherwise, uninflected *ðēo* without *-w* occurs only in the Merc PsGl(A) 108, 28 and (apparently as an archaism) in LawAbt 90, composed c.600, though preserved only in a twelfth-century copy.

² Exactly how to handle synchronically the variation in length of the diphthong evident in most WS is difficult, for there is no obvious synchronic, phonologically based conditioning to produce length. It might be best to regard the underlying stem as short and then morphologically lengthen the stem diphthong in the nom.sg., although this is an unhappy ‘brute force’ solution. See also K.H. Wagner (1969: 253–6).

³ See Fulk (1992: §§162–9), and on Beo particularly, Fulk, Bjork and Niles (2009: 327–8).

⁴ But the usual uninflected form is *hlēo*, which is also found in the dat.sg. at Gen 102, And 567, see Campbell (1977: §584).

⁵ Probably re-formed on the analogy of *cnēow*. The second syllable bears reduced stress, which accounts for the short diphthong.

⁶ Beside forms of the *an*-declension, i.e. *lāreowa*, *lätteowa*.

3.47 In Nbr the status of the above nouns is somewhat obscured by the tendency in that dialect to write the diphthong as <ew>, e.g. *cnēw*, *trēw*, and also the interchange of <eo> and <ea>, see for both Hogg (1992b: §§5.44–5). This makes it difficult to interpret, for example, variations in dat.pl. forms such as MtGl(Li) 17.14 *cnēum*, LkGl(Li) 5.8 *cnēuum*, 22.41 *cnēoum*, although it is most probable that they all represent a diphthong followed by /w/.¹ To the extent that Merc has similar forms, *-w* usually appears, but PsGl(A) also has 73.5 *trēa* gen.pl. and Ca 6.37 *eletrēs* ‘olive tree’ gen.sg., cf. the Nbr forms in n1.

¹ Yet there are a few forms in which this cannot be so, especially in *trēo* ‘tree’, which is usually nom.sg. *trē*, and similarly in sg. inflected forms, e.g. gen.sg. *trēes*, although in the pl. diphthongal forms predominate. The same appears to be true with *strē* ‘straw’ for *strēaw*. This variation is puzzling and remains unaccounted for; see Ross (1940: 47–52), who claims that *trēes* is due to Norse influence (which means that Merc *-trēs* has to be explained separately) and that *strē* is by orthographic analogy to *trē*. Ross’s account seems unconvincing.

3.48 In WS, the only noun of this kind in the *as*-declension with original Gmc */a/ is restructured on the basis of the nom.sg. without allomorphic

variation, i.e. *strēaw* ~ *strēawes*. This noun always shows final *-w* in uninflected forms¹ and hence patterns exactly like e.g. *þēaw* ~ *þēawes* (outside of the nom.&acc.pl., since *þēaw* is masc.), with original Gmc */au/, see §3.45. In other dialects the noun patterns similarly to those discussed in §3.47, see especially n1.

¹ The compound *strēaberige* (alongside *strēawberige*) ‘strawberry’ is scarcely relevant, since either the variations are orthographic or we may assume loss of /w/ in composition. (On the relation of orthography to phonology in early medieval texts, see Laing and Lass 2003.)

3.49 It may be observed from the discussion in §§3.43–8 that, despite the often complex history of this overall group of nouns, the strong tendency in all of them is to develop a new paradigm without allomorphic variation, and in which the nom.sg. ends in either orthographic or phonological *-w*. Essentially, therefore, these nouns come to differ from a noun like *stān* only in the fact that their nom.sg. ends in *-w* rather than *-n*.

(j) *Apocope*

3.50 In nouns of the *as*-declension the only form in which apocope can potentially occur is the nom.pl. of neuter nouns.¹ With monosyllabic neuters the situation in WS is relatively straightforward, in that light-stemmed nouns, with one predictable set of exceptions, see below, show *-u* or *-a*, see §3.9, in the nom.pl. and heavy-stemmed nouns have *-Ø*, e.g. *scīpu* ‘ships’ vs. *word* ‘words’.^{2,3} Apart from the type discussed in n2, the most obvious apparent surface exceptions to this situation are nouns like *wīte* ‘punishment’, with nom.pl. *wītu* despite the preceding heavy syllable. For an analysis of this type, see §3.34.

¹ Recall especially that here nom.pl. includes the synchronically identical acc.pl., see §3.7.

² This general statement is not, however, without exceptions. Some, especially later, texts show *-u* even after heavy syllables. Particularly rich sources include LibSc and PsGl(D), with frequent examples such as *wordu*, *weorcu* (although these may be found alongside other forms like PsGl(D) *scēap* ‘sheep’ pl. This shift, which may have been motivated by a desire to distinguish sg. and pl. forms, can best be analysed as a loss of the synchronic rule of apocope (see below, §§3.65, 3.67, 3.72), which is in any case somewhat morphologized in its restriction to nouns and adjs. against verbs, see further §§4.43, 4.11. See also §3.70 for the situation elsewhere, particularly NNbr.

³ At least at first sight, it seems clear that this variation can be handled by a synchronic rule of *u*-apocope after a heavy syllable, which will apply equally to historical *wa*-stems like *searu* ‘devices’, in which final *-u* may be explained on the basis of the development /sæarwu/ → /sæarw/ and subsequent vocalization to /sæaru/. (Two problems persist, however. The first of these is whether /w/ might be subject to apocope in the same positions, cf. §3.44, and the derivation of *searu* immediately below. The second arises from the existence of the alternative inflexion *-a*, see below.) This rule is presumably a

subpart of a more general rule which apocopes both high vowels (*i*, *u*) and presumably also */j/*, cf. Hogg (1992b: §§6.20, 6.25) for the historical development. Generative treatments such as Kiparsky and O'Neil (1976), Drescher (1978) and Keyser and O'Neil (1985) have a rule normally called High Vowel Deletion (or the like) which follows the broad outlines of this more general apocope. It seems more helpful in the present context to consider only the relevant subpart of the rule without attempting to prejudge whether or not the more general rule is the more appropriate, see Hogg (2000: 355). It should also be noted that the synchronic analysis of the final vowel is made more complex by the alternative form *-a*, see also §3.57n1.

3.51 NNbr is remarkable for the number of instances in which *u*-apocope fails even after a heavy syllable, cf. §3.50n2. Thus, in Li only about 25% of heavy stems have *-Ø* in the nom.pl., see Ross (1937: 55), whilst in DurRitGl *-Ø* is equally uncommon except, perhaps, in the case of *scīþ* 'sheep' (6×) alongside 19.19 *scīþo*, see Lindelöf (1890: 105). This phenomenon is not found in the comparable SNbr or Merc texts, nor in PsGl(A).

(k) *Double plurals*

3.52 As is pointed out in §§2.97–100, all nouns which historically belonged to the *s*-stem class, and were therefore neuter, adopted the endings of the *as*-declension in OE. These nouns are divisible into two groups: (i) those which show an *-r-* after the stem in the pl. but not in the sg.; (ii) those which show an *-r-* throughout their paradigm. The second type shows no particular characteristics of variation which are not found with other *as*-declension nouns of the same syllabic structure, except it should be noted that parallel pairs of nouns are sometimes found with and without *i*-umlaut, e.g. *sele* ~ *salor* 'hall',¹ which is indicative that the original *i*-umlaut variations characteristic of the historical stem class, see §§2.95–6, had been either extended throughout the paradigm or levelled away.² The first type, however, requires further discussion.

¹ See also §3.14&n1.

² The remarks in §3.33n2 on the general loss of any synchronic rule of *i*-umlaut in OE noun morphology are pertinent here.

3.53 Three nouns regularly show the characteristics of type (i) *r*-stems: *æġ* 'egg', *lamb* 'lamb' and *ċealf* 'calf', and the paradigms of the first two, at least, demonstrate that they accept the normal inflexions of neuter nouns of the *as*-declension except that in the plural, *-r-* directly follows the stem and precedes the inflexional ending, hence, for example, gen.sg. *lambes* ~ gen.pl. *lambra*. Since these nouns show the same set of inflexions as other *as*-declension neuters, it is most appropriate to treat the intervening *-r-* as an additional marker of plurality which is inserted before the inflexion. On the other hand, usage with *ċealf* is variable. Often it follows the same pattern

as the other two nouns, but in Ælfric it has adopted the regular plural of masc. nouns of the *as*-declension, e.g. *ċealfas*, *ċealfum* at ÆHom 22.264, 267.¹ Elsewhere in LWS, both patterns are found.^{2,3} In Ælfrician texts, although *ċild* ‘child’ usually displays the forms of a neut. noun of the *as*-declension, as is regularly the case in EWS, cf. §2.99, forms with intrusive *-r-*, i.e. nom.acc.pl. *ċildru*, *-a*, gen.pl. *ċildra*, dat.pl. *ċildrum*, become more common, forming a significant minority.⁴

¹ But note that if these are inflected forms of *ċealf*, then ÆHom 31.103 *an ċealf* acc.sg. shows that the noun remains neut. in gender, and the replacement is purely phonological.

² In INbr, Li shows gen.sg. *cælfes*, *celfes*, with the inflexion of the *as*-declension added to an unlauded stem.

³ Examples of other words are isolated and late: PsGl(D, K) 147.6, OccGl 50.1.2 147.17 *brēadru*, *-a* ‘breadcrumbs’, AldV 1.5125 *hāmedru* ‘sexual intercourse’, LorGl 2.19 *lēower* ‘hams’ (also LorGl 1.17 *lēwera* gen.pl., Ch 1506 *lāuw* nom.sg.), ClGl 1.3862 *speldra* ‘torches’.

⁴ RegCGl 2.116 *ċildran* is dat.pl. Note the curious form *ċildas* in the Nbr MtGl(Li) 19.13, which might be compared with the forms in n2.

3.54 These nouns, however, show one further peculiarity in that their nom.pl. always has inflexional *-u* in WS, i.e. *æġru*, *ċealfru*, *lambru*. There are two possible explanations for this preservation of the inflexion. Firstly, we might suggest that the additional marker of plurality is not /r/ but vowel + /r/, for example /lamburu/.¹ This structure is exactly parallel to that of, say, *hēafdu* ‘heads’, see §3.63, and hence, in a synchronic treatment, apocope would fail and then syncope would delete the vowel of the medial syllable.² Alternatively, we might suggest that the additional marker of plurality is simply /r/ and that, as described in §§3.65, 3.67, 3.72, the rule of *u*-apocope has been lost from the morphology of these nouns.

¹ We discount the possibility that the underlying form of the nom.sg. might also be disyllabic, e.g. */lambu/, for the interaction of that structure with that suggested for nouns such as *bearu* (< /bearw/), see §3.42, would be difficult, as also might be the case with a rule of *u*-deletion to parallel the rule of *e*-deletion required for nouns like *wine*, see §3.33.

² Cf. §3.64 for a diachronic treatment.

3.55 There is evidence in favour of both of these suggestions. For the first, beside expected *calferu*, *lomberu*, PsGl(A) has *calfur* (2×), *lombor* (1×) and Ru2 has *lombor* (3×), the latter of which parallel the structure for disyllabics with a heavy first syllable that were originally monosyllabic, a structure that is observable principally in the dialect of PsGl(A), see §3.64.¹ For the second it should be noted that *ċild* ‘child’, which normally has the regular nom.pl. *ċild*, has in LWS an increasing number of examples of the type *ċildru*, *-a*, which suggests that there is a tendency to see the nom.pl.

of this word and a few others as *-ru*, see §2.99 for further details. A third possibility is that *-u* came to be in LWS proper to the nom.acc.pl. of all disyllabic neuter nouns ending in a sonorant, see §3.72.

¹ Li also has *lombor* at JnGl 21.15, but this is immediately followed by JnGl 21.16 *lomboro*, and note also LkGl 10.3 *lombro*.

(l) *Disyllabic nouns*^{1,2}

3.56 Disyllabic stems may be classified into several subtypes, according to the internal structure of each of their syllables: (a) heavy first syllable with VC second syllable, e.g. *drihten* ‘lord’ (masc.), *hēafod* ‘head’ (neut.); (b) heavy first syllable followed by a sonorant which at least originally was non-syllabic, e.g. *finger* ‘finger’ (masc.), *tācn* ‘sign’ (neut.); (c) light first syllable with VC second syllable, e.g. *metod* ‘creator’ (masc.), *werod* ‘troop’ (neut.); (d) light first syllable followed by a sonorant which at least originally was non-syllabic, e.g. *fugol* ‘bird’ (masc.), *weder* ‘weather’ (neut.); (e) any first syllable with a heavy second syllable, e.g. *cyning* ‘king’ (masc.), *fulwiht* ‘baptism’ (neut.).³ These subtypes reflect historical origins and development rather than synchronic status. Stems of types (b) and (d) are often treated as metrically monosyllabic in some (presumably older, in most cases) OE verse, whilst those of types (a) and (c) are rarely so treated.⁴ Thus, given the conservatism of poetic language, it may be assumed that at some earlier point in the OE period a distinction amongst the types was at least partly maintained. It is necessary to discuss each type separately before considering whether they remained synchronically distinct in later OE.

¹ Many writers refer to these nouns as trisyllabic, given their structure in PGmc with an inflexional ending in the nom.sg., e.g. **metudaz* (> OE *metod* ‘creator’). Such usage is confusing in reference to their synchronic status in OE. Note also that nouns of types (b) and (d) below have a stem-final sonorant which is not in origin syllabic, but which becomes so only by native OE processes of syllabification and epenthesis, see Fulk (1992: §§76–98) and n2 below.

² It will be apparent that the following discussion has been heavily influenced by the work presented in Fulk (1992: §§76–98), which was not available when Hogg (1992b: esp. §§6.38–45) was written. There are, therefore, some differences between the latter account and the remarks on epenthesis and syllabification in the following sections, but we do not believe there are any serious contradictions.

³ Nouns of the type exemplified by *bebod* ‘command’ with pl. *bebodu*, *gebed* ‘prayer’ with pl. *gebedu* are not to be regarded as disyllabic nouns, for in both cases the prefix is unstressed, and therefore they behave exactly as monosyllabic nouns. For the stress of *bebod*, see Hogg (1992b: §2.91(2a)).

⁴ This was first observed by Sievers (1885: 480–2).

3.57 In nouns of type (a) with a heavy first syllable + VC, syncope of the vowel of the second syllable is normal in all inflected forms, to give paradigms of the following types:

	Masculine	Neuter
Singular		
<i>Nom.</i>	drihten <i>lord</i>	hēafod <i>head</i>
<i>Acc.</i>	drihten	hēafod
<i>Gen.</i>	drihtnes	hēafdes
<i>Dat.</i>	drihtne	hēafde
Plural		
<i>Nom.</i>	drihtnas	hēafda, hēafdu ¹
<i>Acc.</i>	drihtnas	hēafda, hēafdu ¹
<i>Gen.</i>	drihtna	hēafda
<i>Dat.</i>	drihtnum	hēafdum

Forms without syncope, e.g. *drihtenes* gen.sg., do occur, however, more commonly in LWS than in Angl, even occasionally in Ælfric, though syn-copated forms always predominate. Such is the synchronic state of affairs; on the historical development of the type, see §3.64. Other nouns which are of this type include:

- (a) masc.: *āþum* ‘son-in-law’,² *ǣled* ‘fire’, *bannuc* ‘cake’,³ *bismer* ‘disgrace’,⁴ *brēmel* ‘bramble’, *bȳtel* ‘hammer’, *dēofol* ‘devil’ (see §2.12n2), *ealdor* ‘prince’, *ellen* ‘courage’ (also neut.), *ēþel* ‘home’, *hassuc* ‘hassock’,³ *mattoc* ‘mattock’,³ *ōfor* ‘margin, shore’,⁵ *scyttel* ‘bolt’, *stȳpel* ‘steeple’, *þēoden* ‘prince’, *þȳmel* ‘thimble’, and the restructured Lat loan *mynster* ‘monastery’, see §2.20n1;
- (b) neut.: *hǣmed* ‘sexual intercourse’, *þȳrel* ‘hole’ and, when neut., see §2.12n2, *dēofol* ‘devil’. The words *lendenu* ‘loins’,⁶ *mægden* ‘maiden’, *nīten* ‘animal’ are inflected the same way, though in WS, unlike in Angl, there is usually no syncope in these, see further Hogg (1992b: §6.32), and §3.64 below.⁷ Also to be included here are polysyllabic nouns with the diminutive suffix *-incel*, e.g. *hūsincel* ‘small house’, *stānincel* ‘small stone’, *ðēowincel* ‘little servant’.⁸

¹ Ælfric seems to prefer *-a* to *-u*, although both occur, see §3.9. The question whether this is a purely phonological development or a substitution of one inflexion for another is of some consequence, since if the latter is the case, the synchronic status of *u*-apocope is called into doubt, see Hogg (1997a). Campbell (1977: §377) appears to claim that the development is purely phonological, but that must be considered doubtful, since *-a* is not substituted for *-u/-o* in the nom.sg. of light-stemmed *ō*-stems, and the substitution must therefore be morphologically conditioned, see Hogg (2000: 366).

² From **aiþumaz*; cf. OHG *eidum*.

³ There appear to be no examples of syncope in these words. This may be either for phonotactic reasons or, less likely, because the vowels of these obscure suffixes could have been long at the time of syncope, cf. §2.17n3, with the references there. If the latter is the case, then they would belong to type (e), like *fultum* ‘assistance’.

⁴ It is noteworthy that syncope occurs even here, as in dat.sg. *bismre*. The phonotactic difficulties of this form are perhaps exemplified by the relative frequency of unaccented *bismere* even in EWS texts such as CP and Or. The noun appears in all three genders.

⁵ Campbell (1977: §574(3)) assigns a short root vowel to this word and classifies it as belonging to type (d), but the PGmc form is usually reconstructed as **ōberaz*: cf. MHG *uover*.

⁶ Always plural, although *lenden* frequently occurs as the first constituent of a compound, as in *lendenece* ‘pain in the loins, loin ache’.

⁷ But cf. Lch II (1) 45.5.1 *nýtne* dat.sg.; however, Lch II *nētnum* dat.pl. and PsGl(B) 77.46 *nētnu* acc.pl. have the Anglian root vowel. Cf. also PsGl(B) 44.4 *lendna* acc.pl.

⁸ See Dahl (1938: 73) on the status of this suffix.

3.58 The typical LWS paradigms of type (b) nouns, in which a heavy first syllable is followed by a sonorant that was at least originally non-syllabic, may be exemplified as follows:

	Masculine	Neuter
Singular		
<i>Nom.</i>	finger <i>finger</i>	tāc(e)n ¹ <i>sign</i>
<i>Acc.</i>	finger	tāc(e)n
<i>Gen.</i>	fingres	tācnes
<i>Dat.</i>	fingre	tācne
Plural		
<i>Nom.</i>	fingras	tācna, tācnu
<i>Acc.</i>	fingras	tācna, tācnu
<i>Gen.</i>	fingra	tācna
<i>Dat.</i>	fingrum	tācnum

Inflected forms with epenthesis, e.g. *fingeres* gen.sg., occur occasionally, especially in Li. Other nouns of the same type include:

- (a) masc.: *æppel* ‘apple’,² *āþm* ‘breath’, *blōstm* ‘blossom’, *bōsm* ‘bosom’, *hleahtr* ‘laughter’, *māþm* ‘treasure’, *sculdor* ‘shoulder’,³ *wæstm* ‘fruit’;
- (b) neut.: *ātor* ‘poison’, *bēacn* ‘beacon’, *cnōsl* ‘race’, *cumbol* ‘banner’, *fācn* ‘crime’, *fōdor* ‘fodder’, *fōdor* ‘case’, *hrīsl* ‘shuttle’,⁴ *hūsl* ‘Eucharist’, *spātl* ‘saliva’, *tūddor* ‘progeny’, *wāþn* ‘weapon’, *wolcen* ‘cloud’,⁵ *wuldor* ‘glory’, *wundor* ‘wonder’.⁶

¹ On the distribution of epenthesized and non-epenthesized forms of the nom.sg., see firstly §3.65.

² Originally an *u*-stem and frequently inflected as such in the plural, e.g. *appla*. Its use may be as a neut. at AldV 1.3734 *-appla*, where the form may result from the equation of *-a* and *-u*.

³ But *sculdor* is exceptional in having nom.pl. *sculdru*, -o, -a. This is not neut. but probably an old dual form, which may be compared with *duru* ‘door’, *nosu* ‘nose’, see Hogg (1992b: §6.25). The modern pl. form occurs just once, in three parallel late interlinear glosses, i.e. PsCa(D, E, K) 7.11 *sculdras*.

⁴ LRid 7 *hrisil* must metrically have a long vowel in the first syllable. This structure is advocated by Smith (1978: 46), Pfeifer (1974: §67) and Fulk (1992: §88n28), although ErfGl 851 *hrisl* is unreliable. For alternative views, see Bülbring (1902: §444), Campbell (1977: §574.4).

⁵ CP has *wolc* (2× side by side at 285.20, 24), and the same form is found very rarely elsewhere. These suggest an originally monosyllabic stem, though whether the word is etymologically monosyllabic cannot be determined for certain, since there are no close cognates outside of WGmc, and hence, e.g., Orel (2003: 474) is undecided. The word is twice metrically disyllabic in Ex. In PsGl(A) the nom.acc.pl. is usually *wolcen* (6×), like other originally monosyllabic nouns in that text, but twice *wolcenu*.

⁶ The historical masc. *u*-stem *winter* ‘winter’, which is always masc. in the sg., has nom.pl. *winter*, which appears to belong to this type. This pl. form occurs alongside rare *wintras* and Nbr *wintru*, -o, -a. The origins and status of the Nbr forms remain undetermined.

3.59 The typical LWS paradigms of type (c) nouns, disyllabic in origin, in which a light first syllable is followed by VC, may be exemplified as follows:

	Masculine	Neuter
Singular		
<i>Nom.</i>	metod <i>creator</i>	werod <i>troop</i>
<i>Acc.</i>	metod	werod
<i>Gen.</i>	metodes	werodes
<i>Dat.</i>	metode	werode
Plural		
<i>Nom.</i>	metodas	werod
<i>Acc.</i>	metodas	werod
<i>Gen.</i>	metoda	weroda
<i>Dat.</i>	metodum	werodum

Other nouns of the same type include:

- (a) masc.: *awel* ‘awl’, *bydel* ‘beadle’, *cradol* ‘cradle’,¹ *darop* ‘dart’, *eodor* ‘enclosure’, *eofor* ‘boar’, *eosol* ‘ass’, *falod* ‘fold’, *farop* ‘sea water’, *hafoc* ‘hawk’, *hamor* ‘hammer’,² *heofon* ‘heaven’, *sadol* ‘saddle’, *seoloc* ‘silk’, *warop* ‘shore’, *weoloc* ‘whelk’.
- (b) neut.:³ *gamen* ‘game’, *mægen* ‘strength’, *ofet* ‘fruit’, *reced* ‘building’, *wæter* ‘water’,⁴ *yfel* ‘evil’.

¹ Campbell (1977: §574(3)) regards this word as belonging to type (d), but cf. Pokorny (1959: 386).

² Campbell (1977: §574(3)) regards these words as belonging to type (d), but cf. ON *hǫmurr*, *soðull*.

³ Campbell (1977: §574(4)) regards **waroþ* ‘seaweed’ as belonging to this group, but it is usually regarded as having a long vowel in the first syllable, as suggested by the poetic metre at Rid40 49 and the apparent etymological connexion to *wār* ‘seaweed’.

⁴ Brunner (1965: §243.3) and Campbell (1977: §574.3) regard *wæter* as belonging to type (d), i.e. with an underlying stem *wætr-*. The stem may have had that form in IOE, see Bermúdez-Otero and Hogg (2003: 111–12), but cf. §§3.71–2; however, etymologically the stem is disyllabic, since the noun is in origin a heteroclitic stem, and in WGmc the paradigm is based on the stem in *-*ar-* rather than *-*n-*, hence **watar-*, see Bammesberger (1990a: 204), also Amos (1980: 73), Fulk (1992: §84n21). Monosyllabic ON *vatn* is based on the stem in *-n-*.

3.60 The typical LWS paradigm of type (d) nouns, in which a light syllable is followed by a sonorant that was at least originally non-syllabic, may be exemplified as follows:¹

	Masculine	Neuter
Singular		
<i>Nom.</i>	þeǵ(e)n <i>servant</i>	wed(e)r <i>weather, storm</i>
<i>Acc.</i>	þeǵ(e)n	wed(e)r
<i>Gen.</i>	þeǵ(e)nes	wed(e)res
<i>Dat.</i>	þeǵ(e)ne	wed(e)re
Plural		
<i>Nom.</i>	þeǵ(e)nas	wed(e)ra, -u ²
<i>Acc.</i>	þeǵ(e)nas	wed(e)ra, -u ²
<i>Gen.</i>	þeǵ(e)na	wed(e)ra
<i>Dat.</i>	þeǵ(e)num	wed(e)rum

Inflected forms with epenthesis, e.g. *þeǵenes* gen.sg., are to be found already in EWS, as well as in Ælfric. Other nouns of the same type include:³

- (a) masc.: *æcer* ‘field’, *befer* ‘beaver’,⁴ *botm* ‘bottom’, *fæþm* ‘embrace’, *fugol* ‘bird’, *hæsel* ‘hazel’, *hræfen* ‘raven’, *nægl* ‘nail’, *ofen* ‘oven’, *reǵn* ‘rain’, *seǵel* ‘sail’ (often neut.).⁵
- (b) neut.: *botl* ‘dwelling’, *bræǵen* ‘brain’ *leǵer* ‘bed’, *setl* ‘seat’.

¹ *Þeǵn* and other words with /j/ before /n/, e.g. *reǵn*, can, especially in LWS, show an alternative development with loss of /j/ and compensatory lengthening to *þēn*, etc., see Hogg (1992b: §7.71) for details. In such instances the nouns pattern exactly as *stān*, etc. But these forms, which we shall ignore here because of their lack of morphological interest, seem always to co-exist with forms without this development.

² Most handbooks give an inflexionless form for the nom.acc.pl. of such nouns, but although, for example, nom.pl. *weder* does occur at Lch II (2) 41.2.1 (though this is an Anglian-derived text), it is not the usual form in WS of any date. The situation is similar in NNbr, but not in Merc, see §§3.70–1.

³ Nouns listed below as lacking an epenthetic vowel never show such a vowel in the nom.acc.sg. Note that JnGl(Li) 1.18 *fæðm* is dat.sg.

⁴ See Campbell (1977: §395n1). The argument of Kümmel (2004) that this word and some others of this type had an alternately monosyllabic or disyllabic stem by case is unpersuasive.

⁵ Campbell (1977: §574(3)) includes here **ofor* 'shore', but see §3.57n5.

3.61 In nouns of type (e), which are characterized by an originally heavy second syllable,¹ either because of a consonant cluster in the rhyme or an originally long vowel which had not been shortened by the time of syncope, see Hogg (1992b: §§6.26–33), syncope naturally does not occur and the words follow the paradigm of *stān* if masc. and *word* if neut. Such failure of syncope is regular when the second syllable is one of the suffixes *-dom*, *-els*, *-had*, *-ing* (and hence *-ling*), *-oþ* (all masc.) and the neut. suffix *-lac*. Typical examples are: *cynedom* 'royalty', *wīsdóm* 'wisdom', *gyrdels* 'girdle', *rædels* 'counsel', *camphad* 'warfare', *çildhad* 'childhood', *æþeling* 'prince', *cýning* 'king', *dēorling* 'favourite', *hýrling* 'hireling', *fiscop* 'fishing', *huntop* 'hunting',² *āglac* 'misery', *wedlac* 'wedlock'. The same structure is seen in: (i) obscured compounds of the type *færeld* 'journey' (also neut.), *fultum* 'help', *hlāford* 'lord' (all masc.), *fulwiht* 'baptism' (neut.); (ii) nouns which have a heavy second syllable due to neither suffixation nor compounding, e.g. *hengest* 'horse', *īsern* 'iron' (neut.; but see §2.21n3), *merisc* 'marsh', see also Hogg (1992b: §6.68); (iii) Lat loans, especially those borrowed no earlier than the time of Christianization, e.g. *altar* 'altar', *apostol* 'apostle'. Naturally, these nouns are morphologically straightforward.

¹ More precisely, when the final syllable of the stem is heavy, thus including the final syllable of trisyllabic words like *æþeling* below.

² And similarly forms with the suffix *-noþ*, e.g. *fiscnoþ*. The *-n-* is extended from related verbs in *-nian*, e.g. *drohtnoþ* 'way of life' beside *drohtop*, due to *drohtnian* 'behave'. Also to be included here are words in which *-oþ* is not due to suffixation, thus *oroþ* 'breath', see Hogg (1992b: §6.5). Perhaps *wāroþ* 'seaweed' is amongst these, see §3.59n3.

3.62 A source of disyllabic nouns in WS rather different from any discussed above is originally neut. *ja*-stems with the suffixes *-enn*, *-ett*, e.g. *æfen* 'evening', *fæsten* 'fortress', *fæsten* 'fast', *wēsten* 'desert', *bærnet* 'arson', *þicçet* 'thicket', see for further examples §2.21. In these nouns there should have been an alternation between ungeminated nom.sg. and geminated forms elsewhere, but degemination is gradually extended, see §3.40. In WS these nouns always have nom.pl. in *-u*, e.g. *wēsten(n)u*, *þicçet(t)u*. From an historical point of view this may be the expected result, although it contrasts with *cynn* 'race' nom.pl., see §2.24n3, Hogg (1992b: §6.25). Synchronically, if degemination is ordered before apocope, or, and perhaps more plausibly, such words are assumed, with the loss of any geminate

examples, to have an underlying non-geminate final consonant, then it is also the case that retention of *-u* would be predicted.¹

¹ In essence, this latter analysis would align such nouns with the type (a) *mæġden* ‘maiden’, etc., in WS, see §3.57.

3.63 If we exclude from the following discussion type (e) disyllabics, which behave exactly like heavy-stemmed monosyllables, we can apparently observe the following variations in the remaining four types: (i) syncope of an unstressed medial vowel after a heavy syllable, as in *drihtnes*, *hēafdes* (type a); (ii) vowel epenthesis between a consonant and a sonorant,¹ as in *fugeles*, *wederes* (type d) and, but very differently, *finger*, *tācen* (type b); (iii) *u*-apocope in neut. nouns of type (c) such as *werod*. Since *u*-apocope is historically a change which occurs either after a heavy syllable (as in *word*) or after a light syllable followed by another syllable (as in *werod*), see Hogg (1992b: §§6.18, 6.20), it will be plain that the structure of the stem and the interaction of the rules of syncope and epenthesis are potentially crucial to the operation of apocope.

¹ Or syllabification of the previously non-syllabic sonorant, since we cannot be certain of the intention behind the orthographic insertion of a vowel before the sonorant.

3.64 Phonologically, the most conservative dialect of OE as regards undisturbed preservation of the results of syncope and apocope as applied to disyllabic stems is the dialect of PsGl(A). In this dialect, exceptions to the rule of syncope in an open syllable after a heavy syllable are vanishingly rare: whilst WS not infrequently has forms with analogically restored vowels that had been syncopated, such as *ēðeles*, *bysmore*, in PsGl(A) such forms do not occur amongst noun stems (and rarely in other declensional stems),¹ with a single, principled exception: syncope fails in a syllable preceding inflexional *-u* (but not *-um*), be it fem.nom.sg. or neut.nom.acc.pl. Hence, in PsGl(A), normal forms are *nētenu* ‘cattle’, *hēafudu* ‘heads’. More remarkably, in PsGl(A) a rather consistent distinction is observed in the nom.acc.pl., but no other case, between stems of type (a) and of type (b): stems of type (a) retain final *-u* in these cases, as they ought on an etymological basis, whilst those of type (b) apocopate it, again as they ought. Thus, there is a rather firm distinction between nom.acc.pl. *nētenu*, *hēafudu*, on the one hand (type a), and *bēcen* ‘signs’, *wēpen* ‘weapons’ on the other (type b),² with few exceptions.³ The principled nature of the general exception to syncope was recognized in the older handbooks (Sievers, 1898: §144&A1; Wright and Wright 1925: §216), though the newer ones, and most recent studies, seem to regard forms like *hēafudu* as analogical creations, see e.g. Brunner (1965: §159A2), Campbell (1977: §353). Rather, the great regularity in PsGl(A) of the distinction between types (a) and (b) in this regard

– a distinction that could not have been recovered once lost, since the paradigms of types (a) and (b) are otherwise identical – must lead to the conclusion that the forms attested in PsGl(A) are the direct results of the historical application of syncope and apocope, and therefore forms like WS *hēafdu*, *dēoflu* ‘devils’ are analogical creations.⁴ The motivation for their creation is to obviate the irregularity that although the inflected stem is otherwise always monosyllabic, before *-u* it is disyllabic, as it is when uninflected. In PsGl(A) this irregularity was handled in a converse manner: there arose nom.acc.pl. *hēafud* (5×) beside original *hēafudu* (2×), by analogy to the nom.acc.pl. of nouns of type (c) like *werod*. For details, see Fulk (2010c).

¹ It appears that the only relevant exceptions are a few adjectivals: *ēoweres*, *ylcere*, *ānhyrnera*, *gedrōēfede*, *forçerrede*. See Zeuner (1881: 65–7).

² As the number of nouns of this type in PsGl(A) is small, and *nētemu* in this respect does not differ from the WS form, see §3.57, to demonstrate the point it is necessary to consider evidence from outside the class of disyllabic nouns of the *as*-declension. The other forms cited in Fulk (2010c: 135, which see for discussion) are the following: *calferu* ‘calves’, *ēadigu* ‘blessed’, *forçerredu* ‘corrupted’, *idelu* ‘idle’, *irenu* ‘iron’ (adj.), *lomberu* ‘lambs’, *lytelu* ‘little’, *ōðeru* ‘other’, *wōērigu* ‘weary’.

³ PsGl(A) 95.5 *đioful* (for *dioful*) nom.pl. is due to the fact that the noun changed gender after the application of syncope and apocope, see §3.138. *Calfur* and *lombur* (beside *calferu*, *lomberu*) may be due to the co-occurrence of monosyllabic and disyllabic forms of the nom.pl. of *s*-stems in PGmc, see §2.99n1, and cf. §3.55. The co-occurrence of *wolcenu* (2×) and *wolcen* (6×) plainly points to analogical disruption, though which form is original cannot be determined for certain, see §3.58n5. The apparent reference in Keyser and O’Neil (1985: 143) to a form *wundururu* in PsGl(A) must be a misprint. On *hēafud* beside *hēafudu*, see below. Amongst the adjectives, there are two instances of *idel* nom.sg.fem. alongside *idelu* (1×).

⁴ Against the possibility that, historically, the rules simply applied differently in the two dialects, see Fulk (2010c: 136–7).

3.65 Historically, type (b) nouns derive from a stem of the type *tācn-* with a final post-consonantal sonorant, but since neut.nom.pl. *-u* is often attached to such stems in WS, there arises the possibility that type (b) has been reanalysed as underlyingly disyllabic, and thus these nouns have been assimilated to type (a), i.e. like *hēafod*. Such, for example, is the view of Brunner (1965: §243.3) and in part Kiparsky and O’Neil (1976: 534). There are reasons, however, to doubt this analysis as a blanket generalization. For LWS it is probably true of stems in post-consonantal /r/, whether with a heavy or a light first syllable. Thus, for example, *ealdor* ‘prince’ and *ealdor* ‘life’ are inflected alike, though the former is etymologically disyllabic (type b) and the latter monosyllabic (type a): both usually have the disyllabic form *ealdor* when uninflected and the monosyllabic stem *ealdr-* before vocalic inflexions. This is because, historically, the former undergoes syncope in inflected cases and the latter epenthesis in uninflected. The same generalization

cannot be made, however, about nouns with stems ending in a sonorant other than /r/, in which a degree of differentiation between types (a) and (b) is maintained. Thus, in Ælfric, several words of type (b) are consistently spelt without a vowel before the final sonorant, thus *ād* ‘disease’, *æðm* ‘breath’, *bēacn* ‘sign’, *wæstm* ‘fruit’, whereas spelling varies in some others, thus *tācn* ‘symbol’ more frequently than *tācen*, but usually *hūsel* ‘eucharist’ rather than *hūsl*. By contrast, throughout LWS, nouns of type (a) are almost always spelt with a vowel before the sonorant in uninflected forms, thus *bismer/bysmor* ‘disgrace’ (never ***bismr/**bysmr*), *(e)aldor* ‘prince’ (never *** (e)aldr*), *drihten* ‘lord’ (never ***drihtn*), *þēoden* ‘lord’ (never ***þēodn*), *dēofol* ‘devil’ (never ***dēofl*), *ēpel* ‘homeland’ (but HIGl C1125 *ēpl*), *engel* ‘angel’ (but *enġl* 2× in Ælfric). It thus appears to be necessary to assume that an underlying distinction was maintained in WS between nouns of types (a) and (b).¹ The situation is similar in NNbr, but there /n/ is treated the same way as /r/, hence *fīnger* ‘finger’ (cf. *fīngeres* gen.sg., *fīngre* dat.sg., *fīngeras* acc.pl.), *bēcon* ‘sign’ (cf. *bēcena*, *bēcno* gen.pl.), *tācon* ‘symbol’ (cf. *tāceno* gen.pl.), *-ād* ‘disease’, *hūsul* ‘eucharist’, *wæstm*, *wæstem*, *wæstim* ‘fruit’ (cf. *wæstma* gen.pl., *wæstmum* dat.pl.). As the examples illustrate, the distinction between /r, n/ and /l, m/ is reinforced by the fact that the former may be syllabic even in inflected cases. Such treatment of medial sonorants is infrequent in LWS, e.g. Lch I 147.1 *fīngeras* acc.pl., Med 1.1 6.8 *æppeles* ‘apple’ gen.sg. Other Angl texts generally treat /r, n, l, m/ alike, writing a vowel before each in uninflected forms, but usually not before vocalic inflexions.

¹ Certainty on this point is unattainable. The distinction between the two types could be due to spelling conventions. Moreover, it should not be assumed that the treatment of all clusters of stop plus sonorant would have been treated identically, see §3.71.

3.66 The application of syncope to nouns of type (a) in LWS, however, does not appear to be governed on a purely phonological basis. It is true that some nouns of type (a) undergo syncope with great regularity according to expected patterns. Thus, in ÆCHom and ÆLS, *dēofol*, *drihten* and *hēafod* always or almost always have syncopated stems before vocalic inflexions. However, by contrast, *ēðel*, *hāmed* and *bismer* are usually unsyncopated under similar conditions.¹ Syncope would therefore appear to have become morphologized and lexicalized in LWS. Syncope applies to nouns of type (a) with great regularity in Merc and SNbr; it is also rather regular, surprisingly, in NNbr, despite the notable irregularity of epenthesis there, see §3.65.

¹ For details, see Fulk (2010c: 132–3).

3.67 A further reason to doubt that the distinction between types (a) and (b) has been neutralized in LWS is that it may be assumed that apocope,

far from being an active phonological rule, has been lost from the synchronic grammar of the dialect and the ending *-u* apportioned on a morphological or lexical rather than a phonological basis, see §3.72 and Hogg (1997a: 119–21). In EWS the loss of apocope appears to be incipient, since \emptyset forms outnumber forms with *-u*, *-a* inflexions,¹ but in LWS the latter forms predominate over the former.² The same situation holds in NNbr, e.g. *bēceno* ‘signs’, *tāceno* ‘signs’, *wundra* ‘miracles’, whilst in SNbr although *-o* is more frequent, forms of *bēcn* occur with and without inflexion alongside one another, i.e. *bēceno*, *-ono* (6×), *bēcun*, *-on* (4×), see Lindelöf (1901: §149c). Ru1 is like PsGl(A) in this regard, showing apocope, e.g. *tācen*, *dēoful*. These latter texts, therefore, show a dialect in which no such reanalysis as that referred to above has taken place.

¹ Except in the case of *wæpn* ‘weapon’, where Or has 4 inflected forms against 2 uninflected forms.

² Heavily so, if not exclusively in Ælfric. But some other, less canonical, LWS texts such as HomU 12.1 (Thomas), LS 10 (Guthlac), both showing a variety of Angl dialect features, have quite frequent examples such as *tāc(en)* ‘signs’, *wundor* ‘miracles’, whilst the intermediate Lch appears more closely to approximate to the EWS situation.

3.68 In Angl, especially PsGl(A), there is a strong tendency to extend syncope to apply after light syllables as well as heavy. This occurs only in inflected forms. Thus, amongst stems of type (c), in PsGl(A) we find the neuter noun *yflum*, *yfla* beside uninflected *yfel* ‘evil’, and *meġne*, *meġna*, *meġnum* (just once *meġene*) beside uninflected *meġen* ‘power’, with etymologically correct apocope of *-u* in *yfel*, *meġen* nom.acc.pl.¹ Syncope fails in such instances almost exclusively when the resulting consonant cluster would be less than optimal in respect of feature compatibilities and sonority hierarchies, as with *reċeda* gen.pl. ‘halls’ in poetry. In LWS there is a similar but less regular tendency for syncope to occur after a light syllable, see Hogg (1992b: §§6.66ff.), but it applies even in uninflected forms, so that we find monosyllabic forms such as ÆCHom II 8.188 *heort* ‘hart’ (also twice glossing Lat *cervus*, in ÆGram and ÆGl), and such syncope is then equally found in inflected forms such as *heortas*.² But the stronger tendency is for such examples to show syncope only in inflected forms, hence frequent *heofnas*, *heofnum*, etc., but only *heofon*, *heofen*, never ***heofn*. There are thus three variations: (i) words always without syncope; (ii) words with syncope in inflected forms; (iii) words with syncope throughout. Type (ii) includes *awel*, *heofon*, *mægen*, *yfel*,³ type (iii) includes *fâld*,⁴ *seolc*, *warþ* ‘shore’ and *weolc*, the remaining words in §3.59 showing no instances of syncope. It would appear that here syncope is controlled by the nature of the final consonant of the first syllable and the consonant of the second syllable, so that syncope always occurs between a sonorant and an obstruent, i.e. type (iii), and it occurs in inflected forms between an obstruent and a

sonorant, i.e. type (ii), whilst it never occurs between two obstruents, i.e. type (i). More problematic is the fact that in LWS including Ælfric the normal form of the neut.nom.pl. is without apocope, i.e. *mæg(e)nu*, *yf(e)lu*. The same is true of NNbr, e.g. Li *mægna*, etc., but not of either SNbr or Merc, where apocopated forms are regular. Since the *-u* which is found in LWS and NNbr is phonologically unexpected regardless of syncope, the forms are problematic, see §3.72 for a discussion of this issue.

¹ Exceptions as regards *-u* do not occur in noun stems, but amongst the adjectives, in the relevant cases *micēlu* (8×) ‘large’ occurs alongside *micel* (4×), and *monigu* (1×) alongside *moniġ* (1×). Both words are antonyms of *lýtēlu* ‘little, few’, by which they may have been influenced by pairing (*lýtēlu ond micēlu*), a tendency perhaps abetted by the alternation between *-igu* and *-iġ* in adjective stems on the basis of the weight of the preceding syllable, e.g. *hefiġ* ‘heavy’ alongside *ēadigu* ‘blessed’, both nom.sg.fem.

² On the other hand, such syncopated forms are infrequent in EWS: for example, amongst the neuter nouns Cosijn (1886: §9b) gives only CP(C) 82.11 †*mægnum* dat.pl., which he takes to be a scribal error, beside CP(H) 83.11 *mægenum*.

³ It seems most appropriate to include here *fæder* ‘father’, historically an *r*-stem, see §2.91. In EWS the paradigm of this word was identical to that of, say, *heofon* except in the gen.dat.sg., where there was zero inflexion, i.e. *fæder*. The same holds true perhaps without significant exception for LWS as exemplified by Ælfric, note only ÆIntSig 59.388 *fæderes*, but later texts such as several of the Psalter glosses show an increasing number of syncopated forms at least for gen.sg. In NNbr the usual form of the gen.sg. is *fadores* (for the medial vowel see §2.94) with occasional syncopated forms and a few forms without inflexion, whilst in Ru2 *fædres* is regular, with isolated unsyncopated and zero-inflected forms. For Merc, PsGl(A) has zero-inflected *feadur* with back umlaut, whilst Ru1 has *fæder* alongside *fæderes* at MtGl 21.31 only. For the dat.sg. all Nbr texts prefer the umlauted and zero-inflected form *feder*, whilst Ru1 has *fæder* and PsGl(A) has *feder*, which is ambiguous but more probably shows second fronting than *i*-umlaut. These forms may be viewed as fossilized relics of the older *r*-stem paradigm. The Nbr nom.pl. *fadero* beside *faderas* is expected for that dialect, see §3.10.

⁴ The circumflex signifies a vowel lengthened before a homorganic cluster, see Hogg (1992b: §§5.202–3). It is noted here because the vowel lengthening, for which cf. PDE *fold*, must be the result, not the cause, of the syncope.

3.69 Historically, nouns of type (d) have a stem of the type *fugl-*, *wedr-*, and hence in the nom.sg. they should show syllabification or epenthesis, giving *fugol*, *weder*, etc.¹ In inflected forms, however, the phonological expectation would be that epenthesis would not occur. Nevertheless, the epenthetic vowel of the nom.sg. is often extended throughout the paradigm. Thus we find in LWS *æceras* ‘fields’ much more frequently than *æcras*, and similarly for most other such nouns, sometimes with unepenthesized forms being uncommon or even rare, so that, for example, unepenthesized forms of the frequent noun *fugol* are not found in the writings of Ælfric, although other LWS texts do occasionally have *fuglas*, etc. The principal deviations from this patterning are with the type *þegnās*, *þegenās*, with /j/ before the stem-final consonant, where the distribution of the two formations tends

to be reversed. Thus, in ÆCHom, ÆELS and ÆEHom the ratio of unepenthesized to epenthesized forms in the nom.pl. of this noun is about 5 : 2. Outside LWS, epenthesis is infrequent even in the nom.sg., see Hogg (1992b: §§6.38–41).

¹ The quality of the epenthetic vowel is initially determined by the quality of the preceding stressed vowel, but in later texts it is most frequently <e> in all environments, see Hogg (1992b: §6.38).

3.70 In the nom.pl., neuter nouns of types (c) and (d) should show *u*-apocope, after two light syllables in the former instance, after a heavy syllable in the latter, see Hogg (1992b: §6.20). Thereafter, epenthesis should have occurred at least in uninflected nouns of type (d), but also sometimes even before a vocalic inflexion, see *ibid.*: §6.41. The result would be, for example, the nom.acc.pl. forms *wæter* ‘waters’ in type (c), *weder* ‘storms’ in type (d). Yet the more frequent WS forms are *wætera*, *-u* and *wedera*, *-u*, already regular in EWS, and such forms cannot be explained on a phonological basis. Perhaps the most plausible explanation is analogy to words of types (a) and (b) in WS with, for example, nom.pl. *deofla*, *-u* ‘devils’ and *wundra*, *-u* ‘wonders’, respectively. The usefulness of the inflexion as a way of distinguishing singular and plural is obvious. Such words represent surface violations of the rule of apocope, and thus they reinforce the argument offered above, see §§3.65, 3.67, that apocope had been lost from the synchronic phonology of LWS. As elsewhere, NNbr forms are similar to those in WS, whilst Merc and SNbr both have the older, apocoped nom.pl. in *-Ø*.

3.71 Type (c) disyllabics, in which a light syllable is followed by VC, e.g. masc. *metod* ‘creator’, *heofon* ‘heaven’, neut. *werod* ‘troop’, *yfel* ‘evil’, are more diverse in their structures than other types, and it is most profitable to distinguish between those in which C is an obstruent and those in which C is a sonorant. In the former instance the normal situation in all dialects is that apocope occurs but syncope fails. It is noteworthy that in nouns of this type in which syncope does occur, a development which appears to be restricted to instances in which the syncopated vowel is between a liquid and an obstruent, e.g. *fald* ‘fold’, see further §3.68, then the noun can be restructured as a monosyllable, as a result of which it patterns like *word* ‘word’. On the other hand, where C is a sonorant, syncope applies in Angl, whilst it is not as common as lack of syncope in LWS, and even in EWS it is less frequent. As for apocope, even in EWS it frequently fails, and failure of apocope is the rule in LWS and NNbr, hence LWS *yfelu*, NNbr *yflu* ‘evils’, etc., as discussed in §3.70. The unexpected failure of apocope in these nouns is also found in LWS in neut. nouns of type (d) in which a light syllable is directly followed by a sonorant, e.g. *weder* ‘weather’,

cf. masc. *fugol* ‘bird’, with LWS pl. *wederu*, *-a*. As these forms illustrate, syllabification of the stem-final sonorant (or epenthesis before it) is general throughout the paradigm in LWS, and it is not unusual in EWS, either, e.g. Or 2 50.4 *æcere* ‘field’ dat.sg. One plausible analysis for these nouns in at least the Angl dialects is that the type (c) nouns like *yfel* are restructured so that they have an underlying form with a stem-final post-consonantal non-syllabic sonorant, e.g. /yfl/. This would then be identical to the type of underlying structure for *weder*. Such a development seems most probable for Angl, where syncope in type (c) is the rule, and epenthesis in type (d) is generally lacking, so that the two types have fallen together. The two have likewise coalesced in LWS, but in that dialect there is considerable variation in regard to the occurrence of syncope and epenthesis, so that it is more difficult to determine whether the underlying form of the stem is monosyllabic or disyllabic. This variation, however, correlates to the phonotactics of stem structure rather than to etymology. Thus, when the stem-final sonorant is *r*, the stem is much more commonly disyllabic in both types (c) and (d): for example, *wæteru* ‘waters’ is more commonly to be found than *wætru*, and *wederu* than *wedru*. If, on the other hand, the difference in sonority between the stem-final sonorant and the preceding obstruent is not so great as in these instances, the tendency is reversed: for example, with vocalic inflexions *nægl-* ‘nail’ is much commoner than *nægel-*, and *hæsl-* ‘hazel’ (4×) occurs to the exclusion of **hæsel-*. A seeming exception to the pattern’s correlation to relative sonority is the stem *setl-*, which appears with a vocalic inflexion very often and almost to the exclusion of *setel-*, which occurs 3× (once in EWS). But this is in conformity with general patterns in the syllabification of OE //.¹ All in all, it seems likelier that stems of types (c) and (d) are underlyingly disyllabic in LWS,² since monosyllabic spellings like *fugl* ‘bird’ (only EWS: Met 27.24) are vanishingly rare, whereas monosyllabic spellings of uninflected stems of type (b), such as *tācn* ‘sign’ and *wæpn* ‘weapon’, are quite common. Even *ofn* ‘oven’, which is to be found in EWS and Nbr, is *ofen* in Ælfric.

¹ See Hogg (1992b: §6.40). Luick (1914–40: §318) observes that generally in OE no epenthesis occurs before // after /d/ or /t/. This orthographic pattern is confirmed by the absence of metrically detectable parasiting with // after alveolar consonants in verse, see Fulk (1992: §§85–6).

² But, to the contrary, Hogg (1997a: 116–17) and Bermúdez-Otero and Hogg (2003: 111–12) regard the underlying stem as monosyllabic in LWS.

3.72 As regards the synchronic status of syncope, apocope, and the underlying distinctions amongst stems of types (a–d), it seems likely that disyllabic nouns constituted a single type in Angl, but not in WS. In NNbr, for example, syllabification (or epenthesis) always applies to a final sonorant after a stop consonant, as with *bēcon* ‘beacon’, *tācon* ‘sign’, and inflected

forms most commonly show syncope or lack of epenthesis, as with *drihtnes* ‘lord’s’ gen.sg., *tācne* ‘sign’ dat.sg. Thus, there are no forms like WS *tācn* to contrast with consistently disyllabic uninflected *drihten* ‘lord’. The situation is similar in SNbr and Merc, but see below on PsGl(A) and the status of apocope in these dialects. It may therefore be supposed that an originally disyllabic stem like *drihten* has become underlyingly monosyllabic in Angl, and that syllabification or epenthesis acts consistently on uninflected stems of types (i) and (ii) and inconsistently on inflected ones. The dialect of PsGl(A), however, must have retained in underlying forms the distinction between types (a) and (b), given the impressive degree of historical accuracy it shows in distinguishing the two types in the nom.acc.pl. of neuter nouns, see §3.64. Apocope may thus have remained a phonologically conditioned rule in the dialect of PsGl(A), where there are very few surface exceptions to the rule, once it is understood that apocope of *-u* does not apply to stems comprising a heavy syllable followed by a light. Only in PsGl(A) is apocope distributed with considerable regularity on an etymological basis, and it is notable that in this dialect the nom.acc.pl. ending always remains *-ul-o*, never *-a*. Forms like *tāceno*, *bēcono* appear in Ru1 and Ru2, belonging originally to type (b), and their treatment in Ru1 more closely resembles that in PsGl(A), whereas their treatment in SNbr more closely resembles that in NNbr, see §3.67. In LWS and NNbr, on the other hand, it seems probable that the synchronic rule of apocope had been lost from the inflectional morphology of *as*-declension nouns. This is because disyllabic neut. stems of all sorts are inflected in the nom.acc.pl. in NNbr, and they are most commonly, though not consistently, inflected in LWS as well. A rule reordering in these dialects, with epenthesis or syllabification ordered before apocope, might account for forms like nom.pl. *bēceno* ‘beacons’, but not for those like *tācnu* ‘signs’ and *wæt(e)ru* ‘waters’.¹ The phonological conditioning of the nom.pl.neut. endings thus appears to have been morphologized, with much analogical reshuffling of the neut.pl. endings amongst the originally distinct stem types. The gradual loss of the rule of apocope in IOE is confirmed by the emergence of heavy-stemmed neuter monosyllables with an inflected nom.pl., e.g. *wordu*, see §§3.50–1. Under these circumstances, nom.pl. forms such as *werod* ‘troops’ would have to have been specially marked to show that they did not take *-u*, and hence the existence of some LWS spellings of the type *werodu*, as at ÆHom 18.405, is unsurprising, since this would be a regularization of the form from a synchronic point of view. Alternatively, it may be simply that in LWS *-u* was added in the nom.acc.pl. to disyllabic stems ending in sonorants but not those ending in other consonants, the only very regular exception being *hēafod*. Two final factors in the loss of any role of *u*-apocope must have been, firstly, the replacement of *-u* by *-a* as the regular inflexion for the neut.nom.pl., and, secondly, the existence of phonologically regular *-u* after a long syllable

in old *ja*-stems such as *wītu* ‘punishments’, see §3.34, and fem. nouns bearing the reflex of the PGmc suffix **-iþō*, e.g. *mærdō* ‘glory’, *yrmbu* ‘poverty’, see §3.98.

¹ Only by assuming that the stem of *wæter* is underlyingly monosyllabic can Bermúdez-Otero and Hogg (2003: 11–12) account for the failure of apocope in LWS on a phonological basis, as avoidance of a word-final cluster with rising sonority (**wætr*).

III *a*-declension

3.73 This declension is the chief declension for feminine nouns in OE and consists exclusively of such nouns. The principal source of its membership is the historical *ō*-stem class, including the *jō*- and *wō*-stems, to which may be added the fem. *i*-stems.¹ Unlike the nouns of the *as*-declension, these nouns regularly have distinct nom. and acc. forms, particularly in the sg., see §3.80 on differentiation in the plural.

¹ Some other nouns, for example historical *u*-stems, may migrate to this declension. These nouns, which form only a small minority of examples, will be examined at relevant points in the discussion below.

1 *Inflexions*

3.74 In LWS the set of inflexions which was attached to the stems of *a*-declension nouns was as follows:

	Singular	Plural
<i>Nom.</i>	-u/-Ø	-a
<i>Acc.</i>	-e	-a
<i>Gen.</i>	-e	-a
<i>Dat.</i>	-e	-um

3.75 The above set of inflexions is inherited from the inflexions of the simple *ō*-stems (§§2.35ff.). In the singular, LWS generally shows little departure from the above set of inflexions, but two variations should be noted. Firstly, light-stemmed nouns such as *ġifu* ‘gift’, *lufu* ‘love’,¹ *racu* ‘narrative’, *sagu* ‘tale’, *talū* ‘tale’, all show occasional examples of extension of *-u* throughout the singular, e.g. *ÆHomM* 1.233 *ġifu*, *HomU*47.87 *lufu*, *ÆLet*4.138 *racu*, *ÆLet*4.1022 *sagu*, *ÆAdmon*1 4.44 *talū*.² Secondly, in a small number of idiomatic constructions, as noted by Brunner (1965: §252A1),³ nouns of this declension may occur with the gen.sg. ending of the *as*-declension. The most common, but still infrequent, instances of this

occur with *help* ‘help’, particularly in constructions with *biddan* ‘pray’, e.g. *helpes biddende*, but also in $N_{\text{GEN}}+N$ constructions, e.g. Seasons 20.134 *helpes tīd*, and in co-ordination with an *as*-declension noun, e.g. HomU 38.7 *helpes and rādes*. Other examples are more isolated, e.g. HomU 26.257 *ādles grānung*, HomU 27.101 *sybbes lufu*. These do not need to be analysed as shifts in gender, but rather as examples of a tendency to generalize *-es* as the marker of gen.sg. in all nouns, see also §3.78 for the situation in Nbr.⁴ In the plural the endings of §3.74 are regular for nom.acc. in LWS, see §2.40 and references therein for the situation in EWS. In the gen.pl., although *-a* remains regular, there is a tendency, not displayed in Ælfrician texts but more common in poetry, for the consonantal inflexion *-ena* to be introduced, usually without metrical consequence, but cf. GenA 2936 *gifena drihten*. This is especially frequent with light stems, e.g. *gifena* ‘gift’, but can very occasionally be found with heavy stems, e.g. Beo 269 *lārena* ‘advice’ alongside 1220 *lāra*. As in other declensions, see §3.9, late texts show occasional examples of dat.pl. in *-an*, e.g. AldV 1.882 *ċeastran* ‘cities’.

¹ In WS, *lufu* generally declines as an *a*-declension noun, but there is a minority of forms from the *an*-declension, most notably in the dat.sg. In Angl it declines as a member of the *an*-declension, cf. Got *brōþru-lubō* ‘brotherly love’, and PsGl(A) even retains the nom.sg. of that declension, i.e. *lufe*, see further §3.106.

² All these examples except that of *lufu* (which is dat.sg.) are acc.sg.; we have not noted any examples of *-u* for the gen.sg. in LWS, and this absence is probably not accidental.

³ See also Sandred (1991: 3–4).

⁴ Such is the argument of Jones (1988); see also Millar (2002a).

3.76 It has already been noted that in EWS, nouns with the suffix *-ungl* *-ing* form a special case, for in these nouns, but especially those with the suffix *-ung*, the sg. inflexion for all the oblique cases is often *-a*, which may be due to harmonic assimilation of the inflexional vowel to the suffixal vowel, see §2.41 and Dahl (1938: 141–3). Although variation between *-a* and *-e* can also be found in Ælfrician texts, e.g. ÆLS(Eugenia) 112 *lēasunga* ‘lie’ dat.sg., ÆLS(Ash Wed) 250 *lēasunge* dat.sg., our impression is that *-e* is more strongly preferred to *-a* in these texts than in EWS.¹

¹ If this is correct, the reasons for the changed tendency are not immediately obvious. It may simply be a product of standardization associated with the *Schriftsprache*.

3.77 A further variation in inflexion characterizes historical fem. *i*-stems. These nouns regularly become members of the *a*-declension, and if they are light-stemmed they pattern identically to the other nouns of this declension, as with *denu* ‘valley’, *fremu* ‘benefit’, see further §2.66. However, in the instance of heavy-stemmed fem. *i*-stems, when they are restructured as *a*-declension nouns they may in the acc.sg. either retain the \emptyset -inflexion

characteristic of the heavy *i*-stems or adopt the inflexions of the new declension. Hence there arises variation between, e.g., *dǣd* and *dǣde* ‘deed’ acc.sg. It seems plain that this variation did not arise much before the ninth century, since the earliest example of *-e* adduced by Dahl (1938: 170) is the Kt Ch 1200.4 *Cyneðrýðe* pers.name which may be dated to *c.*867–70.¹ In Alfredian texts, however, the morphological change is quite well established, and inflected forms outnumber uninflected in the ratio 3 : 2, and even in the slightly earlier Merc PsGl(A) inflected forms account for over one-third of the examples, see Dahl (1938: 167–71) for both the data and the statistics. In the texts of Ælfric, however, the morphological change is carried through with even more rigour, and uninflected forms such as ÆCHom I, 58.16 *brýd* ‘bride’ acc.sg. are in a clear minority.

¹ Note, however, that Beo has a single example of *-e* at 889 *dǣde* required by the poetic metre. This is probably unhelpful in dating either the morphological change or the poem’s composition. But it is possible that *dǣde* in this instance is plural.

3.78 The situation in Nbr is much less plain than in LWS, and it is also necessary to distinguish between the paradigms of light and heavy stems of the *a*-declension. In the instance of light stems the nom.acc.dat.sg. all most frequently show *-o*, which varies with *-u*, *-a*. It is uncertain what exactly this variation represents, but it seems possible that these case forms have fallen together and that the observable vowel variation is due to confusion amongst unstressed back vowels,¹ see Hogg (1992c: 120–1), also Bately (1980: xliv) for possible supporting evidence even from EWS. In the plural, *-o* predominates in the nom.acc., but there are also occasional forms in *-a*, *-e*.² The gen.pl. is regularly *-a*, whilst the dat.pl. is *-um*. In heavy stems, the normal form of the acc.dat.sg. is either *-Ø* or *-e*, although *-a* also occurs. The *-Ø* inflexion in the acc.sg. may have spread from the nom.sg. of such nouns and then been extended to the dat.sg. The plural of heavy stems largely follows the pattern of the light stems.³ A particular characteristic of NNbr is the widespread use of *-es* as the marker of the gen.sg., such forms greatly outnumbering instances with *-e* or, in nouns with the suffix *-ung*, *-a*. This is not to be taken as a shift in gender, but rather the generalization of the *-es* inflexion outside the original *as*-declension, cf. §3.75. The same is not true of SNbr, where the only secure example is MkGl(Ru) 10.25 *nēdles* ‘needle’, against usual *-e*.⁴

¹ Pure syncretism can hardly be the sole cause, given that this does not happen throughout the declensional system. But pressure towards syncretism may be reinforced by the collapse of differences amongst unstressed vowels. Ross (1937: 61–3) gives a number of other possible explanations, but he states that “discussion is unprofitable owing to the number of different explanations possible”!

² In Nbr, *-o* may well be a borrowing from the *an*-declension, where *-o* is regular, see §3.108.

³ Particularly remarkable, however, are a few examples in Li of the inflexion *-as*, as in *ebolsungas* ‘blasphemies’ nom.acc.pl. and similar (6×). This appears to be particularly a property of nouns in *-ung*. Two such forms are found in Ru2, namely *feorðungas* ‘farthings’, *smēunges* ‘inquiries’, but these may be due to influence from Li.

⁴ MkGl(Ru) 13.19 *costunges* ‘tribulation(s)’ is ambiguous: Lindelöf (1901: 108) points out that the Li Lat text has *tribulationis*, which resembles a gen. sg., whilst the Ru2 Lat text has normal nom.pl. *tribulationes*. The gloss *costunges* thus may be intended to represent either gen.sg. or nom.pl.

3.79 The most significant characteristic of Merc texts is that the nom.acc.pl. is either exclusively, as in the instance of PsGl(A), or predominantly, as in the instance of Ru1, *-e*.¹ Other points of note include the regular use of *-e* for the gen.sg. even in nouns with the suffix *-ung*, and the absence of forms with gen.sg. *-es*. Note also that Ru1 has *-e* in the nom.sg. forms *endunge* ‘ending’ (2×), *gēmunge* ‘wedding’.

¹ The contrary examples in Ru1 appear to be restricted to MtGl *wēda* ‘clothes’ and *culfra* ‘doves’, although the latter could be an *an*-declension form, since the noun varies.

3.80 In Kt, although the most usual form of the nom.acc.pl. is *-a*, OccGl 49 regularly has *-e* for the acc.pl., thus 1140 *andlifene* ‘food’, 1178 *lāre* ‘teachings’, 874 *speçce* ‘words’, distinguished from the nom.pl. as in 175 *giofa* ‘gifts’, *saca* ‘disputes’. But since the same text has *-e* for expected *-u* in the nom.sg., e.g. 648 *gefe* ‘gift’, it may be that these forms simply show merger of unstressed vowels.

2 Allomorphic variation

3.81 The basic paradigm of the *a*-declension is exemplified by a light-stemmed noun such as *gifu* ‘gift’, in which the inflexions of §3.74 are added directly to the stem without variation in either stem or inflexion,¹ hence LWS:

	Singular	Plural
<i>Nom.</i>	ġifu <i>gift</i>	ġifa
<i>Acc.</i>	ġife	ġifa
<i>Gen.</i>	ġife	ġifa
<i>Dat</i>	ġife	ġifum

The same situation holds for the other dialects, with appropriate adjustments in inflexional shape.

¹ In fact, even for *gifu* this is not necessarily true, see further §§3.86–7. It is remarkably difficult to find relatively high-frequency words of this declension which are not

subject to some form of allomorphic variation, especially since heavy-stemmed nouns are subject to *u*-apocope, see §3.95.

3.82 As with the *as*-declension, cf. §3.13, there are many allomorphic variations which apply to nouns of this declension. Most of these variations are similar to those of the *as*-declension, although they may have different outcomes. But there are also some variations which are peculiar to the *a*-declension. The variations may be categorized as follows, in similar fashion to the variations in the *as*-declension:

- (i) variations which are the result of earlier sound changes, in particular the following: restoration of \check{a} ; palatalization; back umlaut; loss of [h]; final devoicing; see §§3.83–9;
- (ii) variations which, although often in part reflecting earlier sound changes, are the result of particular syllabic configurations: nouns with a stem-final geminate; nouns with *-w-* preceding the inflexion in oblique cases and the plural; *u*-apocope; see §§3.90–9;
- (iii) variations in nouns which have a stem which either is historically disyllabic or contains a post-consonantal stem-final sonorant in the nom.sg., see §§3.100–4.

(a) Restoration of \check{a}

3.83 Where an *a*-declension noun has stem-vowel /a/ in the nom.sg., as in *cwalu* ‘death’, *faru* ‘journey’, *nafu* ‘nave’, *racu* ‘narrative’, *swaþu* ‘track’, *þracu* ‘force’, *wracu* ‘pain’,¹ then in WS we should expect an alternation between /æ/ in the oblique cases of the sg. and /a/ everywhere else, due to the historical restoration of \check{a} , see Hogg (1992b: §§5.10–15).² But everywhere /a/ is generalized throughout the paradigm, e.g. *faru* ~ *fare*, and forms with /æ/ are infrequent.³ Such examples from early texts include BDS 1, LRid 13 *-faerae* ‘journey’, CP *wræce* ‘pain’ (4×), Beo 154 *sæce* ‘strife’. In Ælfric there is a strong preference for forms with /a/, e.g. *wrace*, although forms with /æ/ do occur, sometimes more frequently in other LWS texts.⁴ The most plausible analysis of these data is that these nouns have undergone restructuring with /a/ as the underlying root vowel throughout the paradigm, e.g. /faru/, /fare/, etc., and hence restoration of \check{a} simply fails to apply.⁵

¹ For the declension of *-waru* ‘people’, see §§2.70, 3.129.

² The situation would be somewhat different in other dialects, especially Angl, because of the different sets of inflexions added in each dialect. However, the principle, that /a/ should appear before a back vowel, /æ/ before a front vowel, is the same in each dialect, and in fact each dialect behaves similarly with respect to this alternation. A major exception to this occurs in those Merc dialects which show second fronting, for which see §3.84.

³ *Sceadu* ‘shadow’, with <ea> throughout, is best explained as having diacritical <e>, see Hogg (1992b: §5.69) and further references therein, and is therefore to be viewed as having generalized /a/.

⁴ But some of these variations may simply be due to the weakness of the phonemic contrast between /æ/ and /a/, see Hogg (1992b: §2.13).

⁵ However, it is possible that /a/ should always occur in stressed open syllables without regard to the quality of the following unstressed vowel and without any appeal to restructuring, see further the discussion in §4.23–4, Hogg (1996) and references therein. Such an account would also explain the variations in PsGl(A) described in §3.84.

3.84 An interesting exception to the description in §3.83 occurs in the dialect of PsGl(A). Here nouns of the above type show <e> in nom.acc.pl., where the inflexion is *-e*, thus *sweðe* ‘tracks’, *wrece* ‘punishments’ (both frequently). Forms with an inflexional back vowel are absent except PsGl(A) 93.1 *wreca* immediately beside *wreca*. It is difficult to determine exactly how to analyse these forms, but the starting point must be that second fronting occurred before any possible restructuring along the lines discussed in §3.83. There do not appear to be any relevant examples in Ru1 to show the later development in Merc.¹

¹ The early glossaries have some forms which may be of relevance. Thus, alongside EpGl 625, CorpGl 1322 *nabae* ‘naves’, ErfGl has *nebae*. But the ErfGl spelling may be due to confusion with <æ>, see Pheifer (1974: §38).

(b) *Palatalization*

3.85 As elsewhere, cf. §§3.18–20, there should have occurred an alternation between stem-final /ȝ/ before a back vowel and palatal /j/ before a front vowel. This would result in, for example, LWS alternations such as *sorg* ‘sorrow’ nom.sg. ~ *sorȝe* acc.sg. The extent to which this actually occurred is not, however, determinable given the nature of the written evidence. Certainly, analogy reduced the paradigm allomorphy in some words.¹ The same alternation between unpalatalized and palatalized /k/ would not have occurred, however, due to the absence of a directly adjacent /i/ in relevant examples.²

¹ For example, Beo 2468 *sorhge* dat.sg., also in Ælfric and elsewhere, must contain /ȝ/.

² Note here the contrast between the related forms *sacu* ‘strife’, without either palatalization or gemination but with restored /a/, see §3.83, and *sæccé* ‘strife’, with both palatalization and gemination and with the stem vowel /æ/. The latter is historically a *jō*-stem, the former an *ō*-stem.

(c) *Back umlaut*

3.86 The historical change of back umlaut, whereby short front vowels diphthongized before a back vowel in the following syllable, see Hogg

(1992b: §§5.103ff.), should have caused an alternation between <i, e> and <io, eo> according to the nature of the inflexional vowel. Amongst commonly occurring nouns of this declension only *ġifu* ‘gift’ is potentially subject to this alternation. In WS, however, this would not occur because of the prior sound change of palatal diphthongization, see *ibid.*: §5.112. Hence we find in *ġifu* an unaltered stem vowel throughout the paradigm.¹

¹ There is the variant spelling *ġyfu*, but this is a typical LWS variation which is not related to the structure of the paradigm, see Hogg (1992b: §5.167). The Angl type *ġeofu(m)*, with back umlaut, occurs in non-Ælfrician LWS.

3.87 In other dialects there is a somewhat variable pattern for this noun, but with a strong tendency to preserve the alternations induced by back umlaut. In the PsGl(A) dialect of Merc the alternations appear to be carried through regularly, hence nom.sg. *ġeofu* ~ nom.pl. *ġefe*, with the single exception of 44.13 *ġefum* dat.pl. alongside 25.10 *ġeofum*. In Ru1 the recorded form for nom.acc.dat.sg. is always *ġeofu*, which points, apparently, to an indeclinable singular, perhaps influenced by a generalization of the back-umlauted stem vowel in the nom. In Nbr, Li shows a variety of forms, sometimes with back umlaut preserved, sometimes with the change levelled away, but never with extension of the umlaut to forms with inflexional *-e*.¹ In Ru2, although there is much variation in the forms of the inflexions, the patterning of the alternation due to back umlaut appears to be phonological. In Kt the phonological alternations are also usually preserved.²

¹ On the other hand, DurRitGl appears entirely regular except for 4.11 *ġeafæ* gen.sg. (alongside *ġefes*), where umlaut has been so extended.

² Note, however, extension of the diphthong in Ch 1508.49 *ġeofe* acc.pl.

(d) *Loss of [h] and final devoicing*

3.88 The only *a*-declension nouns which potentially show stem variation due to intervocalic loss of [h] are the rarely fem. *slōh* ‘mire’ and *lēah* ‘open land’. For the former we find only acc.dat. *slō* in Ch 738, with loss of [h] intervocalically before the inflexion, which is then lost in hiatus. For the latter, similar forms are found in charters alongside forms with <g>, e.g. Ch 264 (Ct 3) †*lēage* (2×), on which see §3.31.¹

¹ Kitson (1990: 203) reports that in charters the most frequent form of the acc.sg. is *lēah*.

3.89 In heavy-stemmed nouns with final /y/ in the nom.sg., in particular *sorg* ‘sorrow’, LWS texts usually show devoicing, i.e. *sorh*, but the voiced fricative is retained in inflected forms, e.g. *sorġe*. Although both *sorg* and *sorh* are common in poetry, devoiced forms appear to be absent from Angl,

thus DurRitGl 1 84.12 *orsorg* ‘free from care’, see also Hogg (1992b: §7.63).

(e) *Geminate consonants*

3.90 The primary source of stems with final geminate consonants in the *a*-declension is the group of originally light-stemmed *jō*-stems such as *synn* ‘sin’, see §§2.45ff. and, for other sources, §3.91. These nouns should pattern exactly as *gifu*, §3.81, except that in the nom.sg. *u*-apocope occurs, see §3.96n1. But from the time of EWS onwards, the historical process of degemination began to affect such nouns in exactly the same manner as for *as*-declension nouns of the same type, e.g. *hyll*, *cynn*, see §3.39, so that final geminate consonants shortened, and an alternation arose between a single word-final consonant in the nom.sg., e.g. *syn*, and a geminate consonant in inflected forms, e.g. *synna*. As with *as*-declension nouns, nom.sg. forms with a single consonant such as *syn* or *hel* ‘hell’ remain in a minority in Ælfrician texts, but there is a sufficiency of such forms to suggest that the representation of degemination was hindered only by orthographic convention. As with *as*-declension nouns, in Nbr the geminate consonants are regularly retained, see §3.39.

3.91 A large number of *a*-declension nouns were formed with the suffixes *-ness*, *-enn*, *-ess*, *-ett*, e.g. *forġifness*, *þēowenn* ‘maidservant’, *hægtess* ‘witch’, *byrnet* ‘hornet’, see §2.47 for further examples and discussion of their historical origins. The expectation would be that, as with the monosyllabic nouns of §3.90, there would, by the time of LWS, be an alternation between single consonants in the nom.sg. and geminate consonants in inflected forms. However, each of these suffixes appears to behave in a slightly different manner, as discussed immediately below.

- (1) The suffix *-ness*, regularly in LWS *-nyss*, most frequently has a distribution in LWS parallel to the monosyllabic nouns discussed in §3.90, although ungeminated forms are probably more frequent in the nom.sg. of these nouns than the corresponding monosyllables.¹ Oddly, perhaps, this is a more conservative distribution than in EWS, where the regular form of the nom.sg. is *-nes*, and *-ness* is relatively infrequent, see Cosijn (1886: §18). In EWS, Or 58.10 *heardsælnesse* ‘misfortune’ and perhaps CP 237.23 *biliwitnesse* ‘simplicity’² show nom.sg. in *-e*. Although similar forms can be seen occasionally in LWS, they do not appear to occur in Ælfric. However, in Nbr (Li, DurRitGl, Ru2) the normal form of the nom.sg. is *-nisse*. Whatever the origin of this use of *-e*,³ it is clear and significant that the result is that the nouns are invariant in the singular, in which they mostly appear. Elsewhere there are parallel examples with *-e* in a minority of forms in both Ru1 and

- PsGl(A). On the form of the stem to which *-nes* is attached, see Suzuki (1990), and see further §6.90.
- (2) Where the suffix is *-enn*, the final geminate is regularly degeminated, and indeed this change is often extended to inflected forms, e.g. *ÆLS* (Julian and Basilissa) 134 *gydena* ‘female gods’. For the relatively infrequent examples of retention of the geminate in the nom.sg., see §2.47(2). Even in Nbr, cf. §3.90, occasional degeminated forms can be found, e.g. *MtGl(Li)* 11.30 *byrðen* ‘burden’. For variation in the form of the nom.sg. of these nouns, see §3.102n1.
 - (3) Nouns with the suffix *-ess* most frequently show a single consonant throughout their paradigm, although occasional geminate forms do occur, in particular with forms of *hæġtes(s)* ‘witch’. For the special Nbr forms of *cnēoris* ‘race’, which is otherwise unexceptional, see §3.93n4.
 - (4) The relatively few nouns with the suffix *-ett*, e.g. *hyrnet* ‘hornet’, usually display the expected alternation between degeminated nom.sg. and forms with geminate consonant in inflected cases. For variation in the form of the nom.sg., see §3.102n1.

¹ For example, both *sōðfæstnys* and *sōðfæstnyss* occur 7× in *ÆCHom* I&II.

² But as Cosijn (1886: §18) points out, *biliwitnesse* occurs immediately after the same form as an acc.sg., and the nom. in *-e* could therefore be taken as a scribal error.

³ Lindelöf (1890: 107) suggests that *-e* is transferred from the oblique cases, and this seems much more plausible than the suggestion by Ross (1937: 71–3) that the nom.sg. is a neuter *ja*-stem inflexion, cf. *wīte* ‘punishment’. Even more unlikely is the possibility, not suggested by Ross, that the inflexion is from fem. nouns of the *an*-declension, for the paradigm of those nouns in Nbr goes against this.

(f) *Stem-final /w/*

3.92 All nouns in this category are historical *wō*-stems, and their regular development would give, in the case of light stems, inflexional *-u* in the nom.sg., e.g. *sinu* ‘sinew’, and in all other cases except the dat.pl. */w/* would precede the inflexion, e.g. nom.pl. *sinwa*. In the dat.pl., */w/* should have been lost before */u/*, but it is regularly restored, e.g. *sinwum*. Heavy stems of the same origin would differ only in that nom.sg. *-u* would be subject to apocope, hence *læs* ‘pasture’ ~ pl. *læswa*. The most obvious synchronic analysis of such nouns is that the stem contains an underlying final */w/*, e.g. */sinw/*, */læ:sw/*, and that there is a rule which vocalizes the */w/* finally, any historical rule which deleted */w/* before */u/* having been lost. Cf. §3.42n2.

3.93 There is, however, considerable pressure to restructure these nouns so that their paradigms become identical to that of other *a*-declension nouns.¹ In this restructuring, the final *-u* of the nom.sg. is reinterpreted as belonging to the inflexion rather than the stem, and hence we find inflected

forms without *-w-*, e.g. *sine*, *sina*. The same occurs with heavy stems, although there final *-u* is apocopated, see firstly §3.95, hence nom.sg. *lēs*, pl. *lēsa*. Such forms can occur quite early, thus Ch 332 *mēda* (c.863) ‘pastures’ and, in a place-name,² Ch 328 *-mēda*.³ In Ælfric the behaviour of these nouns is variable. In the instance of light-stemmed nouns, forms without *-w-* seem to be preferred, hence regular *sina* ‘sinews’,⁴ but in the heavy stems both the older and the newer forms appear, hence both *lēsua* and *lēsa*.⁵ The difference in treatment of light and heavy stems may be due to the identification of final *-u* in the nom.sg. of light stems with the nom.sg. inflexion, which would be impossible in the heavy stems.⁶ Sometimes these nouns develop an epenthetic vowel before /w/. This is particularly frequent with forms of *sceadu* ‘shade, shadow’, infl. *sceaduwe*, *-a*, but similar forms can be found with most other nouns of this type.

¹ In their analysis of these nouns, Kiparsky and O’Neil (1976: 549) assume that the oldest form of the paradigm of the heavy stems showed nom.sg. *lēs*, and thence absence of *-w-* spread to inflected forms, and that there was then a later development which changed *lēs* to **lēsū*. But the latter form is not recorded. They do argue, however, that these nouns all come to share the paradigm of the other *a*-declension nouns, although they fail to note the distinction between light and heavy stems discussed below.

² And therefore perhaps less indicative, although the two charters are related.

³ Or 52.3 *mēd* acc.sg. has in addition Ø-inflexion, see §3.77.

⁴ To be included amongst the light stems of this type is Nbr *cnēureso* ‘race’, see §3.91(3) for the noun elsewhere. This noun is usually indeclinable in the sg. in Nbr except for gen.sg. of the type *cnēureses*, cf. §3.78. A very few forms show retention of *-w-*, e.g. MtGl(Li) *cnēuresua* (3×) beside *cnēuresa* (1×) in the same verse.

⁵ Also to be grouped here are the original *i*-stems *ā* ‘law’ and *sā* ‘sea’ (also masc., chiefly in Angl and poetry) < **aiwi-*, **saiwi-*, see Hogg (1992b: §4.8). *Ā* is usually invariable except in the rare gen.pl. *āa*, whilst the same is true for fem. forms of *sā*. The dat.pl. *sām* (4× in Beo, 2× each in Ex and GuthA,B) is more probably masc. than fem., although it is impossible to be certain, cf. §3.135. The inflected masc. forms are gen.sg. *sās*, nom.acc.pl. *sās*. But alongside these forms there can be found forms with *-w-*, hence nom.sg. *āw*, gen.dat.sg. *āwe*, *sāwe*, dat.pl. *āwum*, *sāwum*.

⁶ That is, if *sinu* was regarded as parallel to *gifu*, the expected stem would be *sin-*, not *sinw-*. A similar analogy could have affected *lēs(w-)*, but there would not have been as compelling a reason to identify this with the *ō*-stems as there was in the case of light-stemmed nouns that had *-u* in the nom.sg.; hence the analogy is not carried through as regularly in *lēs(w-)*.

3.94 In nouns in which *-w-* was immediately preceded by a vowel, it had been lost in the nom.sg. and dat.pl., but it was retained elsewhere. However, in such cases the nouns are regularly restructured with /w/ throughout the paradigm, hence *stōw* ‘place’ nom.sg., *stōwum* dat.pl. alongside, for example, *stōwe*, *stōwa*. This restructuring means that these nouns have the same paradigm as a heavy-stemmed noun such as *lār*. Other nouns like *stōw* include *hrēow* ‘penitence’, *trēow* ‘faith’.¹ Where the root vowel was in Gmc

**/a/*, as in **clawu* ‘claw’, **þrawu* ‘affliction’, the regular development would give **clēa*,² *þrēa*, see Hogg (1992b: §3.19(1)) for details. But in other forms of the paradigm, where */w/* remained historically, the regular development would be to *clawe*, *þrawe*, etc., see *ibid.*: §§5.10–13. Both nouns are restructured in OE, although in opposite directions. For the former, the nom.sg. is restructured as *clawu*, e.g. at *ÆGram* 55.11, with regular oblique forms such as *clawe*. For the latter the nom.sg. is retained as *þrēa*, that form being used for all cases except dat.pl.,³ where the usual form is *þrēam*, beside *Dan* 293 *þrēaum*.⁴ Not surprisingly, there are for both nouns variant forms showing the opposite regularization. Thus we find in non-*Ælfrician* *LWS Alex* 468 *clēa* nom.pl., *PPs* 68.31 *clēo*, *Alex* 473 *clēum* dat.pl.,⁵ *MCharm* 12.7 *clēa* dat.sg., and in *Merc PsGl(A)* 68.31 *clēa* acc.pl.⁶ In the case of *þrēa* the early *Merc* glossaries show nom.sg. parallel to *clawu* in *EpGl* 53 *þrauu*, *CorpGl* 200 *þrauuu*.

¹ To these can be added the historical *ō*-stem noun **brū* ‘eyebrow’ (apparently not recorded in nom.sg.), which in late glossaries usually has nom.pl. *brūwa* rather than *brūa* (found only at *AntGl* 4.988), also dat.pl. *brūwum* (beside *DurRitGl2* 181.6 *brūum*). It seems most probable that the glide has been inserted in hiatus, see Campbell (1977: §589.2), and that the noun may then have been reinterpreted as a regular *a*-declension noun like *stōw*, although *Rid40* *brūna* gen.pl. may speak against this.

² The form is not recorded in OE for the nom.sg.; for *clēa* used in other parts of the paradigm, see further below.

³ But there also occurs occasionally an *n*-stem form *þrēan*, cf. §3.113.

⁴ Although a monosyllable is possible in this verse, it would produce a rare and questionable verse type (Sievers’s type B3), and thus it may be the poetic metre that motivated retention of the disyllabic spelling.

⁵ Also †*clēam*, see Toller (1921: *clawu*).

⁶ On *Phoen* 276 *clām*, see Hogg (1992b: §5.143&n1).

(g) Apocope

3.95 In nouns of the *a*-declension, the only form in which apocope can occur is the nom.sg., where the expected inflexion is *-u*. Naturally, such apocope should occur only after heavy stems, so that the application of apocope will result in a contrast between light-stemmed nouns with *-u* in the nom.sg., e.g. *gifu* ‘gift’, *talū* ‘tale’, and heavy-stemmed nouns with *-∅* in the nom.sg., e.g. *lār* ‘learning’, *wund* ‘wound’.¹

¹ Feminine hypocoristic names of this declension retain final *-u* even after a heavy syllable, hence *LVD* 45 †*Bettu*, 46 †*Beonnu*. It is more probable that this is a stereotyped structure than that such pet names arose only after the period of *u*-apocope.

3.96 Although the variation described in §3.95 is highly regular, there are several groups of nouns which display surface forms of the nom.sg. which either are historically unexpected or appear to be synchronic violations

of *u*-apocope. These nouns can be classified into the following types: (a) historical *jō*-stems with a heavy stem, e.g. *gyrd* ‘rod’;¹ (b) nouns formed with the Gmc suffix **-iþō*, e.g. *strengþu* ‘strength’; (c) historical **īn*-stems which had transferred at an early stage to the *ō*-stems, see §2.88, e.g. *ylðu* ‘old age’. These cases are discussed below in §§3.97–9.

¹ Historical *jō*-stems with a light stem, e.g. *synn* ‘sin’, appear to have undergone the same type of development as the nom.pl. of the neut *as*-declension type exemplified by *cynn* ‘nations’, for which see the discussion in Hogg (1992b: §6.25).

3.97 If historical *jō*-stems with a heavy stem in Gmc had a nom.sg. ending in **-ij-ō*, then the regular historical development of that form would presumably have been to *-u*, hence, for example, **zardijō* > ***gyrðu* in parallel to the neut.nom.pl. type *wītu* ‘punishments’, see §3.34. In order to derive the actual forms, which always show Ø-inflexion, it would at first seem necessary to assume, with Kiparsky and O’Neil (1976: 546–7), that absence of the inflexion in the nom.sg. is due to transferral to the *ō*-stems, with which the expected paradigm of the noun is otherwise identical. However, Gothic shows a contrast in the nom.sg. of light and heavy stems of the form *sibja* ‘relationship’ ~ *bandi* ‘band’, with *-i* as the marker of the nom.sg. in the heavy stems.¹ If the form of the nom.sg. in late PGmc were indeed **zardī*, then *gyrd* would be the expected nom.sg.² In all the other cases, **-ij-* before the vocalic inflexion might have been reduced to **-j-* by syncope, which would then, as usual, be lost after the heavy syllable, leaving the stem followed by the normal *ō*-stem inflexion.³

¹ The exact origin of *-i* (< PIE **-ī*) is uncertain, see Bammesberger (1990a: 101) for some discussion. It is notable that in OE this development is restricted to nouns and is not found with fem. adjectives, e.g. *wildu* ‘wild’, which shows the regular development of **-ijō*. Campbell’s suggestion (1977: §645) that in such adjectives **-ī* was regular and **-ijō* analogical is not obviously correct.

² The earliest forms of OHG heavy-stemmed *jō*-stems have nom.sg. in *-e*, < **-i*, though this may be analogical to the other cases, and there is some reason to think that the endless nom.sg. found in polysyllables, showing apocope of the original ending, is the oldest type, see Braune (1987: §209A2&3).

³ Conflicting views on these developments are discussed in Fulk (2010c). Cf. Brunner (1965: §257A1), Kiparsky and O’Neil (1976: 547). In addition to the reservations discussed above with respect to Kiparsky and O’Neil’s analysis, it should be noted that they are obliged to assume an unsubstantiated earlier stage with final *-u*, i.e. **gierðu*.

3.98 Nouns formed with the suffix **-iþō* should, if the first syllable is heavy, develop regularly into OE with a syncopated medial vowel and, in their nom.sg., an unapocopated inflexional *-u*. The result of syncope is that the historical form of the nom.sg. represents a surface violation of the rule

of apocope, with final *-u* now after a heavy syllable, e.g. *strengþu* ‘strength’. Yet even in EWS, forms of the nom.sg. in *-þu* are entirely unattested, and we find only forms without *-u*, e.g. CP 283 *slæwð* ‘sloth’ (3×), though the incidence is small, with just three other examples, see Cosijn (1886: 26). In Ælfric, nom.sg. forms likewise appear to be always uninflected, see further Pope (1967–8: 183). Phonologically, however, forms in *-u/-o* must originally have been proper to the nom.sg. when **-iþō* followed a heavy syllable, as indicated both by forms outside of EWS and Ælfric, e.g. *fæhþo* ‘feud’ in poetry, and by the analogical extension of *-u/-o* to cases other than the nom.sg., as discussed below. It seems quite probable that the surface violation of *-u* after a heavy syllable has caused reanalysis of these nouns so that the underlying form of the stem is monosyllabic, e.g. */strengθ/*, and that apocope is then applied as normal. In the instance of such nouns with a light initial syllable, syncope did not appear historically, but apocope should have occurred after two light syllables, see §2.37. However, even in these cases syncopated and apocopated forms are regular, e.g. *frymþ* ‘beginning’, demonstrating even more plainly the nature of the restructuring.¹ Some texts show an alternative solution to the irregularity of the nom.sg. by extending the form of the nom.sg. to other parts of the paradigm. This is particularly true of the Merc PsGl(A), which has, for example, acc.gen.dat.sg. *ēbylðu* ‘anger’, *ermðu* ‘poverty’, *læððu* ‘hatred’, identical in shape to 68.25 *ēbylgðu* nom.sg., whilst EWS CP and Or both have similar forms for the nom.acc.pl., see further Dahl (1938: 144–6).² On the historical development of nouns in **-iþō*, see further §2.37.

¹ Note that in all cases the root vowel, which is historically the result of *i*-umlaut, must be supposed to be the synchronic underlying vowel, since the structure for the operation of *i*-umlaut no longer exists.

² The extension of *-u* to the oblique cases is not infrequently attributed to the influence of stems in *-in-*, see §2.88. But Bammesberger (1975) shows the implausibility of this and argues for influence in the opposite direction. Cf. Ringe (2002: 149&n42).

3.99 Although historical *in*-stems are assumed to have merged with *iþō*-stems in their development towards OE, see §§2.88–90, it is noticeable that they appear to be more resistant to the apocope of *-u* than the *iþō*-stems discussed in §3.98. Thus, of the monosyllabic nouns in this group only *yld* ‘age’ regularly shows loss of *-u* in Ælfric, although other nouns do show the same loss occasionally, see §2.90. Even more resistant to the change are disyllabic nouns of the appropriate structure; thus, *meni(g)u* ‘crowd’ appears never to be Ø-inflected. On the other hand, if these nouns retain *-u* in the nom.sg., they can frequently extend that inflexion throughout the singular. Since most of these nouns are always singular, see §2.89, this means that they have become invariable in inflexion.

(b) *Disyllabic nouns*

3.100 In general, disyllabic nouns of the *a*-declension do not give rise to the same complexity of variation as do the comparable nouns of the *as*-declension, cf. §§3.56–72. Regardless of the historical origins of these nouns, from a synchronic point of view the primary distinction between the various so-called disyllabic nouns of this declension lies in whether the first syllable is light or heavy. There are three principal sub-types of nouns with an initial light syllable, and these seem to be exactly the same as those suggested for the similar disyllabic nouns of the *as*-declension discussed in §3.68. Each of these types is considered separately in §§3.101–3. Disyllabic nouns with a heavy first syllable are discussed in §3.104.

3.101 The first type to be considered is the group of nouns in which the second syllable begins and ends in an obstruent, including the following: *dugub* ‘host’, *efes* ‘eaves’, *geogub* ‘youth’. In inflected forms, such nouns do not show syncope after a light syllable, e.g. *duguþe*,¹ but they do have *u*-apocope in the nom.sg. after two light syllables and are thus entirely regular. It must be assumed that WS *æx* ‘axe’ is from **acas*- with historical syncope of medial /a/, which results in restructuring of the noun as a monosyllabic stem.² PsGl(A) *æcesum* dat.pl. and similar Merc forms are regularly derived from an alternative source **acus*-, and Nbr *acas* may be from that same source, see Hogg (1992b: §6.15n3).

¹ But note Rid 49.10 *dugbum*.

² Historically, *lifer* ‘liver’ (§3.102), *sāwol* ‘soul’ (§3.104) have the same syncope, but their later history differs because of the different sequence of consonants which arises.

3.102 Nouns of the second type, with a light first syllable followed by a syllable that begins with an obstruent and ends with a sonorant, include: *netel* ‘nettle’, *spinel* ‘spindle’, *feter* ‘fetter’, *lifer* ‘liver’, *feþer* ‘feather’, *sweġer* ‘mother-in-law’, *byden* ‘barrel’, *lyġen* ‘lie’.¹ The virtually exceptionless appearance of disyllabic forms without *-u* in the nom.sg. suggests that the stems are underlyingly disyllabic whether this is historically the case, as with *netel*, *spinel*, *feter*, *lifer*, *byden*, *lyġen*, or not, as with the remaining forms cited above.² In order to derive an inflected form such as dat.pl. *fetrum*, we must suppose that there is a rule of syncope which deletes the medial vowel before a liquid. This rule must be optional, because in inflected forms syncopated and unsyncopated variants co-exist.³ This type of noun appears to be identical in structure to the type (ii) disyllabic nouns of the *as*-declension discussed in §3.68. It is therefore instructive to note that in the fem. nouns there is no failure to apocopate final *-u* of the nom.sg., whereas in the *as*-declension neuter nouns the failure to apocopate final *-u*

of the nom.pl. is regular. This speaks for the loss of apocope as a phonological rule in LWS, see §3.72.

¹ Campbell (1977: §589(5); see also Bammesberger, 1990a: 148) includes in this group *bisen* ‘example’, but Orm’s *bisne* and the cognate ON *býsn* show that the correct form is *býs(e)n* (as the *DOE* has it), and it thus belongs with the nouns discussed in §3.104. See Kluge (1882: 535).

² A single exception is ClG 1.2788 *eġenu* ‘chaff’, although it is difficult to know how much significance should be attached to this example. The early glossaries in particular also show *-u* after the suffix *-ett*, e.g. EpGl 718 *aelbitu* (= *ylfetu*) ‘swan’, ErfGl 275 *birnitu* ‘hornet’, with which should be compared LWS ÆGl 307.5 *ylfette*, with the form of a fem. *an*-declension noun, and AntGl 2.614 *byrnet* without *-u*. On the other hand, ÆCHom II 13.56 *myneċenu* ‘nun’ is the phonologically predicted form if degemination is assumed.

³ There does not appear to be any significant distinction between words with and without an historical vowel in the second syllable. Thus, from *feter* with an historical vowel the *DOEC* has *fetrum* (2×), (-)*feterum* (8×), whilst without an historical vowel there occurs *feþrum* (14×), (-)*feþerum* (11×). The lack of significant distributional differences and the co-occurrence of disyllabic and trisyllabic inflected variants in both types suggest strongly that they had fallen together in IOE.

3.103 Nouns of the third type, in which the first syllable is light and the second begins and ends with a sonorant, include: *cyl(e)n* ‘kiln’, *eln* ‘ell’. Such nouns appear to be directly parallel to those in §3.102, except that the nom.sg. forms, insofar as they are recorded,¹ fluctuate between monosyllabic and disyllabic structures. Although this may be the result of syncope of an historical medial vowel, it seems probable that it has led to synchronic restructuring of these nouns as having an underlying monosyllabic stem, and therefore they would be distinguished from the second type, discussed in §3.102.

¹ *Eln* occurs only in this shape, see Hogg (1992b: §6.68&n2).

3.104 Nouns which, if the stem is disyllabic, have a heavy first syllable include: *ād̥l* ‘disease’, *nḁ̄dl* ‘needle’, *sḁ̄wl* ‘soul’, *býsn* ‘example’,¹ *ċeaster* ‘city’, *frōfor* ‘comfort’, *wōcor* ‘increase’. All of these stems are monosyllabic in origin except for *sḁ̄wl*, cf. Got *saiwala*. The difference is maintained in IOE, since *ād̥l* and *nḁ̄dl* show epenthesis in neither inflected nor uninflected forms,² whilst *sḁ̄wl* is frequently written with a vowel before <l>: Ælfric strongly prefers *sḁ̄wul*, as does the Merc PsGl(A); similarly, Nbr texts usually have *sḁ̄wel* (or similar spellings), but *sḁ̄ul* occurs not infrequently. Thus, *ād̥l*, *nḁ̄dl* appear to have monosyllabic stems in IOE, whereas *sḁ̄wl* is underlyingly disyllabic. Unlike /l/, however, after an obstruent a final /r/ is always syllabic, see §3.65. Thus, as with similar nouns of the *as*-declension, the words *ċeaster*, *frōfor*, *wōcor* appear to have been re-formed as disyllabic stems, with optional syncope in inflected cases. Absence of inflexional *-u*

in the nom.sg. is therefore etymologically correct in all these words, though *sāwl* presents certain difficulties.³

¹ Originally an *i*-stem, like Got *anabūsns* ‘command’, from PIE **-bhūHt-sni-z*, see Kluge (1926: §147b). What led Campbell to regard this as a disyllabic stem with a light first syllable, see §3.102n1, was most likely Nbr forms like Li *bissena*, *biseno* acc.pl. (The word is partly neut. in Nbr.) To be sure, the Nbr forms are difficult to account for, but the evidence of ON *býsn* and of *bisne* in the *Ormulum* (see §3.102n1), as well as the fact that OE *býsn* is attested three times without syllabified *n*, forbids interpretation of the word outside of Nbr as *bisen*.

² On non-syllabic *l*/ after obstruents, see Hogg (1992b: §§6.40) and §3.71n1 above. Note, however, that *ād*l is metrically disyllabic at GuthB 978, 1064.

³ We should expect early syncope of PGmc **-a-* followed by apocope, hence **saiwalō* > **sāwlu* > *sāwl*, see Hogg (1992b: §6.15). The metrical evidence, however, points to a disyllabic uninflected form from an early date, see Fulk (1992: §98n55), and, as noted above, the orthographic evidence plainly indicates a distinction between monosyllabic *ād*l, *nēd*l and disyllabic *sāwul*. Perhaps the labiovelar quality of */w/* combined with the presumably velar quality of *l*/ to produce early, exceptional epenthesis of */u/* before *l*/ after apocope had applied. But the status of syncope and apocope in **saiwalō* is uncertain, cf. §3.64.

IV *an*-declension

3.105 This declension includes nouns of all three genders, though neut. nouns of the declension are rare. The chief source of its membership is the historical *n*-stem class. For the commonest nouns of this type, see §2.81. Both early and late loanwords continued to be added to the class. Thus, examples of masc. *an*-declension nouns that come from Lat nouns of the second declension are *basiliska* ‘basilisk’, *cristalla* ‘crystal’, whilst masc. examples that come from Lat fem. nouns of the first declension are *glōria* ‘hymn of praise’, *crisma* ‘chrism’, and masc. examples from Lat masc. nouns of the first declension are *pāpa* ‘pope’, *cometa* ‘comet’. Examples of fem. *an*-declension nouns that come from Lat fem. nouns of the first declension are *murre* ‘myrrh’, *albe* ‘alb’, whilst fem. examples from Lat neuters in *-ium* are *centaurie* ‘centaury’, *marubie* ‘horehound’. Masc. *assa* ‘he-ass’ and *āncora* ‘anchorite’¹ appear to derive from Old Irish masculine nouns.

¹ The initial vowel appears to be long: the word is never spelt with initial *o*, and Old Irish *ānchara* has a long vowel.

1 *Inflexions*

3.106 In LWS the set of inflexions which was attached to the stems of *an*-declension nouns with consonantal stems was as follows:

	Singular	Plural
<i>Nom.</i>	-a (masc.); -e (fem., neut.)	-an
<i>Acc.</i>	-an (masc., fem.); -e (neut.)	-an
<i>Gen.</i>	-an	-ena
<i>Dat.</i>	-an	-um

On the inflexion of nouns of the *an*-declension with vocalic stems, see §§3.110–15. Fem. nouns of the *an*-declension with light stems frequently show parallel forms inflected according to the *a*-declension in WS, e.g. consistent *lufu*, though *an*-declension forms of the oblique cases occur; Ru1 has once nom.sg. *lufu*; otherwise, Merc forms are always of the *an*-declension and Nbr forms ambiguous, see §3.108 and Hogg (1997b: 100–1). Other WS forms like this are *ćinu* ‘chink’, *faðu* ‘paternal aunt’, *peru* ‘pear’,¹ *spadu* ‘spade’, *wucu* ‘week’ beside forms with inflexions of the *an*-declension.

¹ From Lat *pirus* ‘pear tree’.

3.107 The above set of inflexions, which in LWS is for the most part stable, is inherited from the inflexions of the *n*-stems (§§2.78ff.). Occasionally *-on* replaces *-an*, e.g. ÆLS (Agnes) 153, Gen 48.10 *ēagon* ‘eyes’ nom.pl., PsGl(J) 134.17 *ēaron* ‘ears’ nom.pl., see Hogg (1992b: §6.60). Such forms are met with occasionally already in EWS, e.g. LawAf 1.32, ChronA 797.1 *tungon* ‘tongue’ acc.dat.sg. (On the other hand, *-on* is organic in *ēastron* ‘Easter’ nom.acc.pl., see §2.87.) Similarly, in the gen. pl., *-ona*, *-ana* occur infrequently for *-ena*, e.g. HomM 5.383 *ēagona*, PsGl(D, G, H, I) *ēagana* ‘eyes’, EWS CP 465.16, Bo 7.17.7 *welona* ‘prosperities’; as the examples show, the variation is usually attributable to dissimilation from the root vowel, see *ibid.*: §6.64. The gen.pl. inflexion may also be reduced to *-na* by syncope when an allowable consonant cluster results, as with Lch II (14×) *ēagna* ‘eyes’, JDayI 23 *brōgna* ‘terrors’. This reduction is commonest in verse, but it is found occasionally already in EWS, e.g. CP (2×) *wilna* ‘desires’. Very rarely do we find *-an* in the gen.pl.¹ A more significant alteration is of dat.pl. *-um* to *-an*, e.g. ÆCHom I, 4.211.150 *dracan* ‘dragons’, ÆLS (Maurice) 48 *ārendracan* ‘messengers’. Examples of this development are to be found already in EWS, e.g. Or 87.14 *ārendracan*, CP 397.25 *gesinhīwon* ‘married couples’. Very likely this change is a phonological tendency abetted by analogical pressures within the paradigm, and the change then spread to other declensions, see §§3.9, 3.75.

¹ Hoad (1994) offers the examples Solil 1 35.16 *ēagan*, ByrM 1 (Baker/Lapidge) 2.3.111 *tīman*, among others.

3.108 In Nbr, the inflexions of the *an*-declension differ notably from those of the LWS paradigms, due chiefly to the loss of final /n/ after unstressed

vowels, see Hogg (1992b: §7.99). As a consequence, *-a* is the commonest ending in most of those cases in which LWS has *-an*; yet *-u*, *-o*, *-a*, *-æ*, *-e* also occur, due to the merger of most unstressed vowels in INbr, see firstly *ibid.*: §§6.59–62. In the nom.acc.pl, however, *-o* is by far the commonest ending in NNbr, and *-u* in SNbr.¹ Very possibly this *-u/o* reflects Pre-OE **-un* of the masc. and fem. acc.pl., extended to the nom. as well; extension in the opposite direction, of nom.pl. *-an* to the acc.pl., is what is found in WS, see §2.85. In that event, *-u/o* might be expected to serve as the commonest ending in the masc. and fem. acc.sg. also, as appears to be the case in eNbr, see §2.86; but whilst *-u/o* is not uncommon in the acc.sg. in INbr, *-a* is most frequent. The inflexion is also most frequently *-a* in the masc. and fem. nom.sg., and thus original *-æ/e* has been displaced in the fem. nouns. In the plural, dat. *-um* is nearly universal, with just a few instances of *-om*.² In the gen.pl., etymological *-ana* predominates, with occasional variants *-ena*, *-una*, *-ano*, *-na*. The last of these appears to be etymologically correct in Li *oxna* ‘oxen’, see §2.87, but not in Li *hīgna* ‘household’. In addition to these regular *an*-declension endings, masc. and fem. nouns may acquire endings of the *as*-declension: *-es* is the commonest ending by far for the gen.sg. in both masc. and fem. nouns, without indicating actual change of gender in the latter, see §§3.75, 3.78; similarly occasional *-as* in the nom.acc.pl. of both genders. The gen.pl. ending *-a* of the *as*-declension also occurs a few times; but the ending *-a* remains much commoner than *-e* in the dat.sg. of both masc. and fem. nouns. The neuters are more difficult to analyse. In Li, *ēgo* ‘eye’ is both neut. and fem., whilst the gender of *ēare* ‘ear’ is undeterminable. Both have expected *-um* in the dat.pl., but otherwise *ēgo* always ends in *-o*, except for one instance of acc.sg. *ēge*; *ēare* otherwise ends in *-e* (2×, acc.dat.sg.) except in the nom.acc.pl., where it ends in *-o* (12×). There do not appear to be any significant differences between NNbr and SNbr in regard to the *an*-declension.

¹ On nom.acc.pl. *exen*, *exin* ‘oxen’, see §2.87.

² Also *-num* in *oxnum* ‘oxen’, see §2.87.

3.109 In Merc, the inflexions of nouns of the *an*-declension in PsGl(A) closely resemble those of LWS. Once there occurs the archaic nom.sg.fem. ending *-æ* in *hraecae* ‘throat’. On nom.pl. *oexen* (beside *oxan*), gen.pl. *oxna* ‘oxen’, see §2.87.¹ In Ru1, on the other hand, the inflexions of this declension resemble those found in Nbr. But beside the range of endings found in Nbr, Ru1 also not infrequently has *-an*, and not just where LWS has *-an* but also in some instances in the nom.sg. of all three genders, e.g. masc. *cuman* ‘visitor’. Another dissimilarity to Nbr is that although *-u* sometimes appears in the nom.acc.pl. of masc. nouns, it is never found in feminines in the plural. There is also more variability in the inflexions of the neuters of this declension than in Nbr, e.g. acc.dat.sg. *ēge* ‘eye’.²

¹ Gen.pl. *wurðigna* and dat.pl. *wurðignum* ‘enclosures’ are no longer generally analysed as showing transferral of syncopated *an*-declension endings to *as*-declension nouns, but as stem *wurðign-* plus inflexion, this stem being common in place-names.

² For details, see Brown (1891–2: II, §§65–7).

3.110 Certain masc. and fem. nouns of the *an*-declension, but no neuters, have stems that end in a vowel or a diphthong, for reasons that are explained in §§3.111–15. Under such circumstances, the initial vowel of the inflexions tabulated in §3.106 has historically contracted with the final vowel or diphthong of the stem, with such consequences for those vowels and diphthongs as are described in Hogg (1992b: §§5.131ff.). After contraction, metanalysis of the endings produced a set of inflexions that now began with, or consisted of, a nasal consonant, or if the inflexion contained no consonant at the time of contraction, resulted in zero-inflexion. The typical inflexions in LWS are thus as follows:

	Singular	Plural
<i>Nom.</i>	-Ø	-n
<i>Acc.</i>	-n	-n
<i>Gen.</i>	-n	-na
<i>Dat.</i>	-n	-m

3.111 The expected LWS paradigms for nouns of this type thus would be as follows:

Singular

<i>Nom.</i>	gefā <i>enemy</i>	wēa <i>woe</i>	twēo <i>doubt</i>
<i>Acc.</i>	gefān	wēan	twēon
<i>Gen.</i>	gefān	wēan	twēon
<i>Dat.</i>	gefān	wēan	twēon

Plural

<i>Nom.</i>	gefān	wēan	twēon
<i>Acc.</i>	gefān	wēan	twēon
<i>Gen.</i>	gefāna	wēana	twēona
<i>Dat.</i>	gefām	wēam	twēom

None of these dat.pl. forms is actually attested, but other, similar ones are found, e.g. Wid 31, 58 *Swēom* ‘Swedes’. Yet just as with some other vocalic stems, see §§2.31–2, 3.47, *-um* may be restored in the dat.pl. by analogy to the ending on consonantal stems, as with metrically ambiguous Rim 32 *frēaum* ‘lords’.

3.112 As in respect to other nouns of this class, the inflexions added to these contracted stems in PsGl(A) resemble those found in LWS, whilst

other Angl texts diverge notably from the WS pattern. The endings in PsGl(A) agree with those given in §3.110, the only remarkable point about such words being some unusual diphthongs, e.g. nom.sg. *lēa* ‘lion’ (4×) for expected *lēo* (1×), see Hogg (1992b: §5.139). Ru1 has only acc.sg. *gefēa* ‘joy’ and dat.sg. *scūa* ‘shadow’, and thus, once again, it resembles Nbr rather than PsGl(A). In Nbr, due to the loss of final nasal consonants, we should expect that gen.pl. *-na* would be the only consonantal inflexion preserved, though in fact no instance of a contracted *an*-declension noun is preserved in the gen.pl. in Nbr. Loss of *-m* in the dat.pl., however, is confirmed by Li *scīu* ‘shins’. The gen.sg. has only analogical *-s* (only *lēas* ‘lion’ is attested). Otherwise, nouns of this type generally end in a diphthong of which <a> is the second element, except that <ea> and <eo> are interchangeable in Ru2, see *ibid.*: §5.44. Notable also is nom.acc.pl. *hrāo* (beside *rā*) ‘roe’; cf. *-u/o* in the uncontracted nom.acc.pl., §3.108.

3.113 One source of the vocalic stems discussed in §§3.110–12 is forms in which /w/ was lost in WGmc before /u/, with subsequent vowel contraction, see Hogg (1992b: §3.19). Thus, for example, PGmc acc.sg. **frawunum* > **fraun-* > *frēan* ‘lord’. In the course of this line of development, the contracted stem analogically replaced forms of the stem in which loss of /w/ would not have occurred, e.g. gen.pl. **frawanōm*, see §2.84. Like *frēa* in this respect are *wēa* ‘woe’ and occasional *an*-declension forms of *prēa* ‘affliction’, i.e. *prēan*, cf. §3.94.

3.114 Another, later and commoner source of the vocalic stems discussed in §§3.110–12 is forms in which vowel contraction occurred upon loss of intervocalic [h], see Hogg (1992b: §§5.131ff.). Thus, for example, **zifeaha* > *gefēa* ‘joy’. These nouns include *ēa* ‘water’,¹ *ġefā* ‘enemy’, *ġefēa* ‘joy’, *flēa* ‘albugo’,² *flēa* ‘flea’,² *rēo* ‘blanket’, *sēo* ‘pupil of the eye’, *slā* ‘sloe’,³ *tā* ‘toe’,⁴ *twēo* ‘doubt’, *hō* ‘clay’, and probably *cēo* ‘crow’.⁵

¹ Usually a root-stem, see §2.111&n8, but cf. *ēan* ‘rivers’ nom.pl. found in EWS, Ælfric and elsewhere.

² Also a neuter *a*-stem *flēah*.

³ There also occurs a rare *ō*-stem *slāh*, though the form *slāg* that is frequently cited occurs only as the initial constituent of the compound *slāhþorn* ‘black hawthorn’. The *ō*-stem is very likely a back-formation from this compound.

⁴ There also occurs an *ō*-stem *tān*, derived from the oblique cases of this. Cf. WS *tā* ‘twig’, §3.115.

⁵ Probably from **cýhæ*, see Hogg (1992b: §5.42), hence without palatalization of *c*.

3.115 The final source of the vocalic stems discussed in §§3.110–12, at least in WS, and in part in PsGl(A), is forms in which hiatus between a stem-final vowel and an inflexional vowel has been lost to vowel contraction, see Hogg

(1992b: §§5.136ff.). Words of this type include *bēo* ‘bee’, pl. *cīan* ‘gills’, *dā* ‘doe’, *flā* ‘arrow’,¹ *lēo* ‘lion’,² *scīa* ‘shin’,³ pl. *Swēon* ‘Swedes’, *tā* ‘twig’.¹ Of unknown derivation, possibly to be grouped here, is *pīe*, *pēo* ‘sort of insect’.

¹ Due to back-formation from *flān*, *tān*, with perception of *-n* as inflexional rather than stem-final; cf. ON *fleinn* ‘dart’, Got *tains* ‘branch’.

² From Lat.

³ Angl only.

2 Allomorphic variation

3.116 There is relatively little variation of an allomorphic nature amongst stems of the *an*-declension. WS tolerates very little paradigmatic allomorphy resulting from back umlaut. Thus, for example, *weolan* ‘riches’ occurs occasionally in both Early and Late WS (never in Ælfric), but *welan* is the usual form. Back umlaut is more pervasive in Angl, but even there it is hardly regular: thus, for example, in PsGl(A), the umlauted stem *ondwleot-* ‘face’ appears 21 times, the non-umlauted *ondwlit-* 5 times, though the inflexion always contains a back vowel, this being a masc. noun; in Li this stem is only *ondwlit(t)-* (7×); in DurRitGl (2×) and Ru1 (7×) it is only *andwliot-*. In fem. nouns there might be expected variation due to the restoration of *ā*, since the nom.sg. inflexion is *-e*, whilst all other inflexions contain a back vowel; usually */a/* is extended throughout, e.g. *hrace* ‘throat’, *faðe* ‘paternal aunt’, *nihhtegale* ‘nightingale’, but cf. ErfGl 1.715 *hræca* ‘throat’. Likewise *hacele* ‘cloak’ always has <a>, except in syncopated Li MtGl 5.40 *hæcla* ‘cloak’ acc.sg.; but there is always <æ> in *ðæcele*, *fæcele* ‘torch’ and related forms. Alternation between *hīgan* and *hīwan* ‘family’, *mūga* and *mūwa* ‘heap’, is due to Verner’s Law, see Hogg (1992b: §4.9(3)).

V Minor declensions

1 Minor a-plurals

3.117 This small declension consists almost entirely of historical *u*-stems such as *sunu* ‘son’, *hand* ‘hand’, see §2.73 for a fuller list of examples, and so their paradigm in LWS remains unaltered from the EWS paradigm presented in §2.72, repeated here for convenience:

	Singular		Plural	
	Light	Heavy	Light	Heavy
<i>Nom.</i>	sunu	hand	suna	handa
<i>Acc.</i>	sunu	hand	suna	handa
<i>Gen.</i>	suna	hand	suna	handa
<i>Dat.</i>	suna	hand	sunum	handum

3.118 The only allomorphic variation of significance is the variation between $-\emptyset$ and $-u$ in the nom.sg., which could be analysed as due to the operation of the synchronic rule of u -apocope that applies within the paradigms of nouns of other declensions, most relevantly in the nom.sg. of the fem. a -declension, see §§3.95ff.¹ The supposition that u -apocope applies synchronically necessarily implies that light- and heavy-stemmed nouns of this type belonged synchronically to the same declension, and that the inflexional forms in this declension were not merely stereotyped relics of the older stem class.

¹ But apocope seems to have been lost from the declension of disyllabic nouns of the a -declension, at least in LWS and NNbr, see §3.72. Yet it is of course possible that apocope survived in other declensional classes as a phonological rule with lexically marked exceptions.

3.119 In LWS the degree to which the historical u -stems remain as a -plurals appears to be lexically dependent, varying from lexical item to item. In particular, the most frequent u -stem, namely *sunu* 'son', seems most resistant to class transfer. Furthermore, it is often difficult to determine whether or not fem. nouns have transferred to the a -declension, since the plural inflexions would have remained unaltered. The general details are as follows:

- (1) The commonest light-stemmed masc. nouns, *sunu* 'son', *wudu* 'wood', most usually retain their historical inflexions in Ælfrician texts, but there are occasional examples of nom.acc.sg. *sunu*, *wudu*. This may be due either to merger of unstressed vowels or to the nouns' having become indeclinable,¹ although it is likely that the latter would be no more than a consequence of the former. The better Ælfrician texts do not show any signs of these nouns' having adopted the inflexions of the an -declension, a development which becomes strongly characteristic of later texts, especially charters, see further §3.141.² There is insufficient evidence to establish the behaviour of the other nouns of this type, but note that AldV has *medewes* 'mead' gen.sg. and *medewa* nom.pl.,³ with which compare an as -declension noun such as *bearu* 'grove', see §3.42.
- (2) Of the heavy-stemmed masc. nouns, all show at least some examples of transfer to other declensions, and in Ælfric the following at least appear to have been transferred regularly to the as -declension: *eard* 'country', *færeld* 'journey',⁴ *feld* 'field', *flōd* 'flood',⁵ *hād* 'person'. Only *æppel* 'apple' and *winter* 'winter' appear to retain the historical inflexions on a regular basis, although note frequent *æpples* gen.sg., and later texts often have *winter* neut.nom.pl. of the as -declension.⁶ The evidence for the behaviour of the remaining nouns of this type in Ælfrician texts is either completely lacking or insufficient.⁷ The most frequently retained historical inflexion appears to be the dat.sg. in $-a$, e.g. *felda* commonly alongside

felde,⁸ but this may simply reflect a merger of the two unstressed vowels. Although transfer to the *as*-declension is clearly the dominant pattern in Ælfric, this is not true of later texts such as charters, where these nouns very often display the inflexions of the *an*-declension.

- (3) For the two light-stemmed fem. nouns, Ælfric appears to retain the historical inflexions for both *duru* ‘door’ and *nosu* ‘nose’, although since the inflexions of the plural would remain unchanged if these nouns had transferred to the *a*-declension, and since there is evidence elsewhere, cf. *feldelfelda* dat.sg. in (2) above, that *-e* and *-a* may have fallen together, it is difficult to determine the significance of this beyond the nom.acc.sg. There are some very rare forms which might indicate that *duru* could (partially) transfer to the mutation plurals on the analogy of *hmutu* ‘nut’, see §2.73n7, especially BenR 70.5 *dyre* dat.sg. and ÆLS (Pr Moses) 324 *dyran* nom.pl., the latter apparently with both mutated /y/ and the inflexion of an *an*-declension noun.⁹ But the forms often cited from PsGl(K), e.g. *dyru*, are better interpreted as the result of scribal confusion, see Sisam and Sisam (1959: §49), and it may be best to regard all forms with medial <y> as suspicious.
- (4) The most frequently occurring heavy-stemmed fem. noun is *hand* ‘hand’, which in Ælfric generally retains the historical inflexions, in so far as they can be distinguished from the inflexions of the *a*-declension. ÆLS has 4 examples of dat.sg. in *-e*, cf. comparable forms above. Similarly, the dat.sg. of *flōr* ‘floor’ fluctuates between usual *flōre* and less frequent *flōra*.

¹ Except, of course, in the dat.pl., where inflexional *-um* is stereotyped.

² Note also ÆCHom II 11.109.578 *wudas* acc.pl., also found rarely in other texts such as GD(C) and PsGl(B,C,D,E).

³ Campbell (1977: §614n1) suggests that *medewa* should be read as *medewas*.

⁴ Both masc. and neut.

⁵ In Ælfric, *flōd* is regularly neut., although elsewhere it is most usually masc.

⁶ By an obvious semantic analogy, *sumor* ‘summer’ is often attracted to this declension in parallel to *winter*. Ru2 has *wintru* (3×), which is not wholly expected if it is nom.pl., see §3.65. The form could be gen.pl., although this is less probable given both the Latin text and the OE syntactic tendencies, on which see Mitchell (1985: §548).

⁷ However, Campbell (1977: §613) cites the following EWS forms: gen.sg.masc. *æples*, *eardes*, *hādes*, *wintres*, dat.sg.masc. *earde*, *flōde*, *hāde*, *sumere*, *wealde*, nom.acc.pl. *æpplas*, *heargas*, dat.sg.fem. *dure*, *nose*; also, with confusion of back vowels, acc.sg. *wuda*, dat.sg. *duru*. See also §2.73.

⁸ Ælfric has once the *an*-declensional form ÆLS (Vincent) 237 *feldan* dat.sg.

⁹ There are also occasional examples of *duran* with the same inflexion, cf. the comments under (2) above.

3.120 In Nbr the situation is broadly parallel to that in LWS, and only a few traces remain of the historical system. Of the nouns which remain

and which are well attested, it is notable that *sunu* ‘son’ is invariant in DurRitGl¹ and that although there is variation in Li between *sunu* and *sunu*, the latter preferred in the pl., such variation is unlikely to have been significant. The noun *winter*, which is probably underlyingly monosyllabic, see §3.72, has nom.acc.pl. *wintru*, *-o* alongside *winter*, the latter DurRitGl only, which forms are not easily to be explained, given the usual treatment of such plurals in NNbr, see §3.67. The fem. *duru* is in NNbr mostly *duru*, but in SNbr *dura*, these variations probably due to varying representations of the same unstressed vowel, whilst the few examples of *hond*² are ambiguous as to their import.

¹ Excluded here and in what follows below is any discussion of the dat.pl.

² On the Nbr form of *hand*, see Hogg (1992b: §5.5).

3.121 In Merc, only *sunu* consistently follows the historically expected paradigm, and even there, Ru1 has examples showing transfer to the *as*-declension, notably MtGl(Ru) 26.37 *sunas*, 21.28 *sunes* both acc.pl., note also 27.56 *sunena*. The pattern here is therefore not significantly different from elsewhere.¹

¹ The little evidence provided by the later Kt texts suggests that here, too, almost all examples had transferred to other declensions, although examples such as OccGl 49.281 *dure* gen.sg. could merely show reduction of the inflexional vowel.

2 *Mutation plurals*

3.122 This declension, principally composed of historical root-stems, see §§2.109ff., consists of a small number of nouns generally of high frequency. In LWS the paradigm of heavy stems of this declension generally remains unaltered from the EWS paradigm presented in §2.110, repeated here for the sake of convenience:¹

	Masculine	Feminine
Singular		
<i>Nom.</i>	fōt <i>foot</i>	bōc <i>book</i>
<i>Acc.</i>	fōt	bōc
<i>Gen.</i>	fōtes	bēc
<i>Dat.</i>	fēt	bēc
Plural		
<i>Nom.</i>	fēt	bēc
<i>Acc.</i>	fēt	bēc
<i>Gen.</i>	fōta	bōca
<i>Dat.</i>	fōtum	bōcum

In addition to these historical root-stems, the masc. monosyllabic *nd*-stems *fēond* ‘enemy’, *frēond* ‘friend’ most frequently follow the paradigm of *fōt*.²

¹ For the paradigm of light stems, see the discussion in §3.124.

² But not, as far as can be ascertained, the far less frequent *tēond* ‘accuser’, see §2.106&n1. It is presumably significant that only the high-frequency nouns conform to this declension, since such nouns can more easily tolerate apparent irregularity.

3.123 Although it is plain that there is an alternation between an unumlauted vowel in the nom.acc.sg., gen.sg., and gen.dat.pl. and an umlauted vowel in the remainder of the paradigm of these nouns,¹ it is dubitable whether this alternation could have been governed synchronically in LWS by a phonologically conditioned rule of *i*-umlaut, though this has often been the assumption in generative approaches to OE phonology.² In particular, it should be noted that in heavy stems the presence of an umlaut vowel correlates closely with the absence of any overt inflexional suffix. If, therefore, there were a synchronic phonological rule of *i*-umlaut, it would be necessary to propose an underlying /i/ in all those forms in which there is no overt inflexion, except the nom.acc.sg. A non-phonological analysis of these nouns, on the other hand, would mark all uninflected oblique cases as subject to umlaut and palatalization, thus defining umlaut as a case/number marker where no other marker existed but would have been expected from the behaviour of other nominal paradigms.

¹ Exactly correlating with the presence of umlaut is the presence of a palatalized velar where this is appropriate. That correlation is entirely expected, since the historical */i/ which caused umlaut would also have caused palatalization.

² Amongst generative accounts it is not always possible to determine whether any given synchronic rule of *i*-umlaut is phonologically or morphologically conditioned (or some mixture of the two), since most such accounts do not deal directly with this group of nouns. It is, nevertheless, probably significant that the most explicit account, namely that of K.H. Wagner (1969: 265), proposes a purely phonological rule of umlaut, as does that of Erdmann (1974: 7). Other such discussions, such as that in Kiparsky and O’Neil (1976) or Drescher (1978), also propose a phonological rule of umlaut, but they do not discuss the present group of nouns, and therefore it is probable that they would extend the rule to the present group. Amongst introductory textbooks, Mitchell and Robinson (2006: §58) appear to assume a rule of *i*-umlaut, whilst Quirk and Wrenn (1957: §§48–9) are carefully noncommittal on the issue. Only the remarks of Pilch (1970: §17) can be plausibly interpreted as indicating that the rule of *i*-umlaut had in these nouns been morphologized. Umlaut in related modern Germanic languages, but not in Old English, has been discussed within the framework of Optimality Theory in Klein (2000) and Gibson and Ringen (2000).

3.124 The only direct phonological evidence for the existence of a purely phonological synchronic rule of *i*-umlaut comes from light-stemmed nouns of this declension, of which just three, all fem., are attested, namely *hñitu* ‘nit’, *hñutu* ‘nut’, *studu* ‘post’,¹ see §2.111.² These nouns, however, which

are relatively infrequent, show considerable variation in form. Both *hnutu* and *studu* are regular in nom.sg., also the latter in acc.sg. (where the former is unattested), and as expected have unumlauted forms in gen.pl. *hnuta*, *studa*, dat.pl. *hnutum*, *studum*, whilst nom.acc.pl. *hnyte* shows the expected umlaut, as does nom.pl. *styde*, *styþeo* (both at Alex 8.21), as well as dat.sg. *-hnyte*, *styde*.³ On the other hand, in the dat.sg. and, perhaps, gen.sg., see §2.113&n3, unumlauted forms of the type *stude* occur alongside unumlauted forms, which may suggest that umlaut has been levelled away from the sg. and remains only as a marker of the nom.acc.pl. If that is so, it is difficult to see how the umlaut could be anything other than a purely morphological marker of number.⁴

¹ *Studu* has a variant form with an intervocalic fricative, hence, e.g. *stuþe*, *stude* alongside *stude*. This variant form may be an exception to the regular WGmc occlusion of *[ð], see Hogg (1992b: §4.17).

² In such nouns the presence of inflexional *-e* in, for example, nom.pl. *hnyte* can apparently best be accounted for by the assumption that it is from an underlying /i/ which would cause *i*-umlaut (cf. nom.sg. *hnutu*) before being lowered to /e/ or, in the case of heavy stems, before being lost. The evidence afforded by *hnutu* is unhelpful, since its root vowel is plainly unaffected by *i*-umlaut, and therefore any variations in that noun are ignored, see rather §2.111n11.

³ Note that dat.sg. *-hnyte* is found only in the compound *pīnhnyte* ‘pine-nut’ at Lch II 2.2.8.

⁴ This, of course, would be a precursor of the situation in later periods of English.

3.125 If the suggestions in §3.124 with respect to light-stemmed nouns are correct, then it is logical to suppose that the heavy-stemmed nouns of the same type would gradually have lost any effect of phonological rules of *i*-umlaut and palatalization, and that these rules would have been replaced by purely morphological rules to account for the alternations. Such a shift would have encouraged the development of new inflexional forms which patterned according to more regular paradigms. For discussion of these forms, see the treatment of masc. nouns in §3.126 and fem. nouns in §3.127.

3.126 Amongst masc. nouns of this type there appears to be a continuum which develops with, at one end, *fēond* ‘enemy’ and, at the other, *tōð* ‘tooth’ and *fōt* ‘foot’, in that the former quite frequently acquires the inflexions of the *as*-declension, hence nom.acc.pl. *fēondas*, dat.sg. *fēonde*, whilst such forms are rare for both *tōð* and *fōt*. *Frēond* ‘friend’ lies somewhere between the two. It must be noted, however, that plurals of this sort in *-as* occur only in Anglian texts and Saxonized texts of Anglian origin, and in poetry.¹ The dative in *-e* is more widespread, though in Ælfrician texts even this is rare.² Note the thoroughness with which these changes have been carried through in the poetic portion of the Paris Psalter, of seemingly late Angl origin, which includes among its forms *fōtas* ‘feet’ (3×),

57.5 *tōðas* ‘teeth’, in addition to *fēondas*, *frēondas*.³ The prose portion shows no such innovations. We may therefore assume that the historical inflexions, at least in WS, were largely preserved in these masc. nouns until very late in the period.

¹ See Fulk (1992: §355(5)), with references. Because the plural in *-as* is an innovation, its use in poetry would appear to attest to the Anglian origins of most surviving verse, as the language of poetry is otherwise exceptionally conservative.

² The only instances are *ÆCHom* II 243.60, *ÆHom* 11.167 *fēonde* dat.sg. Thus, there appears to be some tendency for the replacement of unmlauted forms by inflected forms to occur firstly in the dat.sg., cf. the situation with fem. nouns as described in §3.127. The historical gen.sg. had, of course, been replaced by the inflexion of the *as*-declension in prehistoric times, see §2.113.

³ Note also *Dream*, which has consistently *fēondas* (3×), *frēondas*; also *Phoen* 311 *fōtas* and *Phoen* 407, *Soul* II, *MSol* 114 *tōðas*.

3.127 Amongst fem. nouns there appears to be a somewhat greater tendency to restructure than is the case for masc. nouns. Thus, amongst these nouns the following forms show restructuring without umlaut of the gen. or dat.sg.:¹ (a) gen.dat.sg. with inflexional *-e* from the *a*-declension: *āce* ‘oak’, *bōce* ‘book’, *burge* ‘city’; (b) similarly in the gen.sg. only: *fūre* ‘furrow’,² *gāte* ‘goat’, *gōse* ‘goose’, *mūse* ‘mouse’;³ (c) similarly in the dat.sg. only: *þrūge* ‘trough’;⁴ (d) in the dat.sg. but without inflexion: *āc*, *bōc*, *burg*, *furh*, *grūt* ‘meal’, *þrūh*, *þrūg*.⁵ In the above words such restructuring may occur in a minority of total forms,⁶ but in the further nouns *niht* ‘night’, *ēa* ‘river’ restructuring is normal, at least in LWS, see further §2.111.⁷ In the case of *niht* ‘night’, restructuring in WS may be to either unmlauted forms or unmlauted *neahht* (the latter, however, only in texts of Angl origin), whilst in Angl the usual form is unmlauted *næht*.⁸ *Ēa* ‘river’ is usually unmlauted and uninflected except for dat.pl. *ēam*.⁹ In the nom.acc.pl. there are many fewer forms which show restructuring, but *Ælfric* has regular *burga*, even though the usual dat.sg. is *byriġ*. Otherwise such forms appear to be rare,¹⁰ and note in particular that nom.acc.pl. of *niht* ‘night’ is regularly uninflected. An unusual characteristic of these fem. nouns is that in a very few examples the *an*-declension gen.pl., see further below, is found together with an unmlauted stem vowel; these include: Notes 2 17.102 *brēcena* (to *brōc* ‘legging’), *LkGl*(Ru) 14.19 *cýna* (to *cū* ‘cow’) and possibly *Lch* I 75.5 *gātena* (to *gāt*). These nouns may also, occasionally and mainly in late texts, acquire the inflexions of one or other of the major declensions, including the masc./neut. *as*-declension, e.g. *bōces* gen.sg., *bōcas* nom.acc.pl., *hnutena* gen.pl., cf. above.

¹ The absence of examples of various words from the following types may often be due to no more than the relatively infrequent occurrence of the relevant items, rather than any systematic absence.

² From *furh* with loss of *h* between voiced sounds.

³ Place-names of Celtic origin, e.g. *Cent* ‘Kent’, similarly show *-e* in the gen.sg. but are inflexionless elsewhere. This has led some writers, e.g. Brunner (1965: §284A7), Campbell (1977: §628.6), to classify them as fem. nouns of this declension. It might, however, be preferable to classify them as indeclinable except in the gen.(sg.), where they acquire the usual inflexion of fem. nouns.

⁴ From *þrūh*, cf. ON *þró*. Thus, *h* should have been lost, but its restoration may have been effected by analogy to an alternation such as *bēah* ~ *bēage*, see Hogg (1992b: §§7.59ff.).

⁵ *þrūh*, *þrūg* is like *furh*, cf. n2.

⁶ But the situation varies from noun to noun. In some cases, e.g. *gōs* ‘goose’, *mūs* ‘mouse’, restructuring appears to be the norm, whilst in others, especially *bōc* ‘book’, it is quite infrequent.

⁷ *Cū* ‘cow’ is more complex, since all inflexions should have been lost except in dat.pl. *cūm*; also gen.pl. *cūa*, see Hogg (1992b: §5.143). The mutated forms are retained in *cȳ* dat.sg., nom.acc.pl., but note PsGl(A) 67.27 *cȳe* acc.pl. with the usual Angl inflexion of the *a*-declension. Lch II 38.11.6 also has gen.sg. *cūe*.

⁸ In Angl, PsGl(A) 18.2 has unlauded nom.sg. *neht*, dat.sg. *nehte*.

⁹ But other forms can be found. Thus, EWS has gen.sg. *ēas*, and dat.sg. *ēae* is found in Bede and also Ru1. The dat.sg. forms *ēæ*, found at Chron(A) 896.8 and elsewhere, and *ēe*, found at Or 19.32 and elsewhere, could as well demonstrate orthographic confusion as some form of the dat.sg. in *-e*. For the plural form *ēan* of the *an*-declension, see §3.114.

¹⁰ Campbell (1977: §628) cites Ch 587 (= Birch 945) *fūra* as acc.pl., but it could well be gen.pl., since this is the usual case governed by *andlang* in this charter (as well as elsewhere).

3 *Miscellanea*

3.128 There are a few further nouns which seem to form discrete but small paradigm sets of their own, in particular the masculine historical *i*-stems which refer to names of nationalities, e.g. *Engle* ‘English’, and the historical *r*-stem nouns of kinship, for example *mōdor* ‘mother’. Although these nouns have, historically, morphological features which distinguish them from other nouns, it is worth noting that the set of nouns in each of these categories can be well defined in semantic terms, and it is most probable that their semantic homogeneity leads to their preservation as discrete morphological groups.

3.129 The masc. nouns of nationalities are discussed and exemplified in §2.70, which should be consulted for fuller details. In general these nouns retain throughout the period the declensional characteristics which they display in the earlier texts, although there is some evidence of the further extension of the gen.pl. inflexion *-ena*, as in, for example, AldV *-warena* ‘inhabitants’. Since in the course of the period the other original *i*-stem nouns had transferred to the appropriate major declensions, these nouns must be interpreted as having developed into a minor irregular class of their own.

3.130 The five kinship nouns, namely *brōðor* ‘brother’, *dohtor* ‘daughter’, *fæder* ‘father’, *mōdor* ‘mother’ and *sweostor* ‘sister’, can be divided into three morphological types. The first type consists solely of *fæder*, which during the period gradually assumes all the inflexions of the *as*-declension, most reluctantly so in the gen.dat.sg., see §3.64n3 for a discussion of the various forms of this noun and dialectal variation. The second type consists solely of *sweostor*, which is characterized by zero-inflexion except in the gen.dat.pl., where it has the usual inflexions *-a*, *-um*.¹ The remaining three nouns pattern together, and the distinguishing characteristic of their inflexion in Ælfrician texts is that the nom.acc.pl. is regularly in *-a*, less commonly *-u*, and is never uninflected as is possible in earlier texts; hence we find *brōþra*, *-u*, *dohtra*, *-u*, *mōdra*, *-u*.² On the typical LWS variation between *-a* and *-u*, see firstly §3.9. It is notable that in Ælfric the *i*-umlauted dat.sg. forms *brēðer*, *dehter*, *mēder* persist and are not subject to analogical levelling,³ but in INbr and also lMerc, e.g. Ru1, umlauted forms are rare, in contrast to the earlier PsGl(A), where umlauted forms are found in both gen. and dat.sg.

¹ On variant forms of *sweostor* and also the collective nouns *gebrōþru* ‘brethren’, *gesweostru* ‘sisters’, see §2.93n3.

² For the relatively infrequent nom.acc.pl. of *mōdor* Ælfric has only *mōdru*, see §2.91n2, but *mōdra* occurs elsewhere, and we may assume the same distribution of inflexions as for the other two words in this group.

³ Presumably the *i*-umlaut is morphologically, rather than phonologically, conditioned. It is not plain how much importance should be attached to the value of the vowel of the final syllable, i.e. the variation between *-or* and *-er*. The evidence of Ælfric would suggest that this alternation is by this time a free orthographic variation without significance, which seems plausible in the light of the gradual merger of unstressed vowels.

3.131 A further group of nouns with particular morphological characteristics of their own is the disyllabic historical *nd*-stems, for example *hettend* ‘enemy’. Historically, these nouns are characterized by Ø-inflexion in the nom.acc.pl. and the adjectival gen.pl. inflexion *-ra*, see §§2.105, 2.108 for details and discussion, although otherwise they have the same set of inflexions as masc. *as*-plural nouns. In LWS the tendency apparent already in EWS further to regularize the inflexional system of these nouns grows stronger, but this is coupled with extension of the adjectival *-r-* of the gen.pl. to the other plural forms, esp. nom.acc.pl. The consequence of this is that in Ælfric the most frequent nom.acc.pl. inflexion appears to be *-ras*, as in ÆCHom II 228.218 *lufīgendras* ‘lovers’, ÆLS (Auguries) 42 *wyrğendras* ‘revilers’, ÆHom 5 *biddendras* ‘petitioners’, and a few others. This inflexion is even commoner in some other late texts, such as AldV, where the dat.pl. inflexion is often *-rum*, as against Ælfric, who retains simple *-um*. By this late date, therefore, it would appear that these nouns have

been reanalysed as regular *as*-plurals except that they have a double plural marking by virtue of medial *-r-*.

VI Gender and declension

3.132 A minority of nouns show during the period variation in gender and/or declension, and such variation may be either dialectally or diachronically conditioned, or it may even be a matter of apparently free variation. Variation which is principally a matter of gender is discussed in §§3.133–9 and changes which are primarily of declension in §§3.140–3.

1 Gender

3.133 In the discussion of variation in gender it is important to distinguish between two types of variation. The first of these is variation in grammatical gender, whereby, for example, a commonly masc. noun may in some circumstances, such as in a particular dialect, be fem. or neut. (but rarely all three). In the second type, variation is due to the competition of natural and grammatical gender and the gradual erosion of the historical system of gender. We deal with these two types of variation separately below and in the order presented here.¹

¹ There are two major secondary sources for discussion of the first type of variation, namely Fleischhacker (1889) and Kitson (1990). Kitson's study, which is based on charter material, is critically important for his assessment of dialect variation. Most of the data discussed below are taken from these sources, which must be consulted for further details. Additionally, Cosijn (1886) is invaluable for EWS.

3.134 Some variation in grammatical gender appears to be systematic, in that the variation applies to a definable subset of nouns, whilst other kinds of variation appear to occur in an isolated fashion. Amongst subsets of nouns which show variation in grammatical gender, the following two closely related types are particularly noteworthy:¹

- (1) Neut. *i*-stems with the prefix *ge-*, which at least originally had a collective meaning, would appear to have been assigned their gender originally on the same basis as older Gmc collectives such as OE *yrfe* 'inheritance'. Examples of these nouns include: *gebenn* 'proclamation', *gedwyld* 'error', see §2.64 for further examples.
- (2) Originally fem. *i*-stem collective nouns such as *gebygd* 'thought', *gebeaht* 'thought', see §2.67, often become neut. in parallel with the other collectives, perhaps in particular those mentioned in (1) above.

¹ See Fleischhacker (1889) for details of these and other groups.

3.135 Nouns that are usually masculine which can be found in fem. or neut. forms include the following of particular interest, see Fleischhacker (1889), Kitson (1990) for further cases:¹

dīc ‘ditch’: Kitson (1990: 204–7) shows quite clearly that this noun is in Angl and the SE (Kt) masc.,² but in WS indeclinable fem., with dat.sg. *dīc*, cf. §§2.12n3, 2.18n1.

gylp ‘pride’: in EWS sometimes neut. (CP 3×) against more frequent masc. (CP 9×); in Ælfric it seems always masc., although some later texts show neut. forms;

heofon ‘heaven’: in EWS this word is masc., but in Ælfric and other, later texts it commonly appears as fem. and may also take the inflexions of the *an*-declension. The latter characteristic seems to demonstrate that the shift in gender is due to the parallel with *eorþe* ‘earth’, see Fleischhacker (1889: 251).

hyll ‘hill’: sometimes fem., esp. in WS, Merc charters, but masc. in Hwiccean. ÆCHom I 576.28 *of ælcere hylle* is also fem.

lēah ‘open land’: this is masc. in the central WS area, but it is fem. in Angl and also the South-East, see Kitson (1990: 203–4).

sǣ ‘sea’: almost always masc. in Angl and poetry, in EWS predominantly fem. (excepting Or, where it is more commonly masc.), and in Ælfric almost exclusively fem.³

secġ ‘sedge’:⁴ masc. in Lch, but neut. at ÆGr 69.16 *þis secġ*.

wylle ‘spring’: Kitson (1990: 208–10) shows that in charters this noun can be either masc. or fem. and may belong to either a vocalic or a consonantal declension. It appears to be masc. in the south, i.e. in WS or Kt charters, but fem. in Merc. It is consonantal in Kt and WMidl, but the variation in declension seems to be independent of the gender variation.

¹ We have excluded, for example, occasional contextual or idiosyncratic variations, such as GenA 1186 *seo sǣl* for usually masc. *sǣl* ‘time’. On the unusual gender of certain nouns in Beo, see Fulk, Bjork and Niles (2009: cxlv).

² The suggestion of Fleischhacker (1889) that it is more frequently masc. when it has the same signification as *weall*, even if true, seems irrelevant. See further §3.143.

³ For details, see Fulk (1992: §355.2); also Kitson (2002: 485–6); on the fem. form at Beo 2394, see Fulk, Bjork and Niles (2009: 244).

⁴ Etymologically connected with *secġ* ‘sword’ fem.

3.136 Nouns that are usually neuter which can be found expressing other genders include the following of particular interest, see also Fleischhacker (1889), Kitson (1990):

bæc ‘back’: this is generally neut. in literary texts and also in charters of the Thames Valley, but fem. in the South-East.¹

ēpel ‘land’: almost always masc., but it is occasionally neut. in Bede, and cf. OFris. *ēthel* masc.&neut., OHG *uodil* masc., OSax *ôþil* of uncertain gender, ON *óðal* neut.

ġēar ‘year’: in EWS, although usually neut., it occurs as masc. in Or (2×) and also as both masc. and neut. in Ælfric, but more frequently neut. in other late texts.

hæð ‘heath’: this noun appears to have been originally neut., but masc. forms become widespread, perhaps from WS.²

hlāw ‘burial mound’: although probably neut. in origin, cf. Goth *hláiw*, it appears mainly in masc. and fem. forms, see Kitson (1990: 192–3) for the complex geography.

lof ‘praise’: almost always neut., but note Beo 1536 *longsumne lof*, which is masc.

wēsten ‘desert’: this noun is usually neut., but in EWS both CP and Or show fem. forms alongside neut. ones.³

¹ See further Kitson (1990: 199), also for the relation to *bæce* ‘beck’.

² Kitson (1990: 195) shows that fem. gender is not recorded for this noun, against Fleischhacker (1889: 239), although fem. gender is normal for cognate forms in other Gmc languages.

³ Note also PPs 77.52 *wēstenas* acc.pl., which suggests masc. gender.

3.137 Usually fem. nouns which can be found expressing other genders include the following of particular interest, see also Fleischhacker (1889), Kitson (1990):

ārist ‘resurrection’: although originally fem. and regularly so in EWS,¹ this noun is usually masc. or neut. in Ælfric, but it may also remain fem. both in Ælfric and other late texts.

ēow(o)d(e) ‘flock of sheep’: fem. in Ælfric, neut. in the Blickling homilies, the OE Bede, some saints’ lives and poetry (i.e. Anglian-derived texts), according to Kitson (2002: 484).

flōr ‘floor’: usually fem., but it is masc. at Beo 725. Both genders are found in MHG, and ON *flór* is masc., suggesting that the variation is Gmc.

īġ ‘island’: although this is almost always fem., a group of charters centring on the south and central Midlands consistently show masc. gender, see Kitson (1990: 194) for a helpful map.

lyft ‘sky’: most commonly fem. (*i*-stem), but there are a number of neut. forms, as in ÆHex (4×)² and ByrtM. Infrequently the noun appears as masc. Cf. OSax *luft* masc. or fem., OHG *luft* masc. or fem., Got *luftus* masc. or fem. (*u*-stem), ON *loft* neut. (*a*-stem).³

wyrð ‘farmstead’: this has a distribution very similar to that of *īġ*, see above.

¹ Note, however, CP(H) 363.3 *ārestes* gen.sg.

² But not, to our knowledge, in other Ælfrician texts.

³ Bammesberger (1990a: 157) explains the variation in gender and stem type across the Gmc languages as due to the co-occurrence of a PGmc masc. stem in **-tu-* and a fem. in **-ti-*.

3.138 There are two pairs of cultural-religious nouns which show a probably non-productive type of natural gender. The first pair consists of *dryhten* ‘lord’ and *þēoden* ‘prince’. These nouns were probably in origin fem., see §2.47&n3, but in OE they are always masc. Of more interest are *god* ‘god’ and *dēofol* ‘devil’. The former is regularly masc., but in a variety of texts throughout the period not including Ælfric it sometimes appears as neut. in the plural, i.e., *godu*, *-a*, when referring to pagan gods, see §2.12n4. In Ælfric, *dēofol* is regularly masc. in the sg. but neut. in the plural, and this is also the case in many other texts.¹ Such usage would seem to be making a deliberate theological point, and it cannot be taken as part of any general shift to natural gender.

¹ But note that in *Solomon and Saturn* (Sol II, MSol, but not Sol I) *dēofol* is also neut. in the sg.; the pl. is not attested in these texts.

3.139 In INbr the widespread extension of a variety of inflexions such as gen.sg. *-es*, nom.pl. *-as*, and plurals in *-o*, *-a* to declensions to which they were not organic led to a situation whereby gender distinction in nouns had generally been lost, and gender could be determined only by agreement relations within the noun phrase. A result of this is that many nouns appear to occur with unhistorical genders. This has led some writers, notably Ross (1937), to speak in particular of a process of ‘neutralization’, whereby nouns with asexual references but masc. or fem. grammatical gender begin to show neuter agreement. However, in a notable series of studies, Jones (1967a, 1967b, 1971, 1988) has shown that the situation is rather different, and that questions of case assignment and discourse marking are beginning to take over from gender agreement. In these circumstances the INbr system must be seen not as a (partial) switch from grammatical to natural gender, but rather as the evolution of a different system of marking a variety of grammatical features which is permitted by the loss of distinctive gender markers but in which nevertheless the system of grammatical gender remains intact.¹

¹ See also Mitchell (1985: §§66–8) and Peinovich (1979: 198–203) and, for examples parallel to the Nbr system in *Guthlac*, Roberts (1970). On occasional, but in part systematic, shifts to natural gender of the type in Judg 4.21 *seo wifmann* and for anaphoric reference according to sex, see Mitchell (1985: §§69–71). On factors contributing to the eventual loss of grammatical gender from the language, see Markus (1988). On gender shifts in the transitional language of ChronE, see Pysz (2005), and more generally in Old English and early Middle English, Curzan (2003: esp. ch. 3).

2 Declension

3.140 In speaking of changes of declension it is important to recognize that this discussion is confined to instances in which nouns transfer from one of the declensions discussed in the preceding sections of this chapter to another of those declensions. There are, therefore, two important types of change which are not relevant here:

- (a) When a noun shifts from, say, the *i*-stem class to either the *as*-declension or the *a*-declension according to gender, this is a consequence of the restructuring of the morphological system of OE which has been discussed extensively above and is not in the present sense a change of declensional affiliation.
- (b) There is generalization of individual inflexions formerly particular to one declension across a wider range of declensions. Thus, for example, in INbr¹ there is widespread use of gen.sg. *-es*, originally associated only with the *as*-declension, across nouns of all declensional types, but this is not indicative of a shift of any individual noun to the *as*-declension.² Other important examples of the generalization of inflexions include the spread of the *-ana*, *-ena* gen.pl. inflexion of the *an*-declension (see §§3.9, 3.75) and the spread of the late dat.pl. *-an* inflexion due to generalization in the *an*-declension (see §§3.9, 3.75, 3.107).

In the following brief sections, concerning only the commonest changes, we deal firstly with transfers from the minor declensions, then with transfers between the major declensions, and finally with transfers associated especially with late non-literary texts, in particular charters.

¹ And sporadically in other dialects, see §3.75, also Sandred (1991: 3–4). As Sandred observes, outside of Nbr the change occurs primarily by analogy in paired terms, e.g. *tō mēdes* (fem.) by analogy to *tō lēanes* (neut.), both ‘as reward’, or in words that would otherwise bear no overt indication of case, e.g. *cūs* ‘cow’s’, *ēas* ‘river’s’, both fem.

² On the other hand, such usage is preliminary to later forms of English in which that same genitive or its historical descendant is regular for all nouns. The same is also true of the more sporadic use in INbr of nom.pl. *-as*, which must be seen as a precursor of the situation in later English.

3.141 The masc. minor *a*-plural nouns *sunu* ‘son’, *wudu* ‘wood’ usually retain their historical inflexions, see §3.119(1), but in a variety of late texts, nom.pl. *sunan* from the *an*-declension occurs frequently, as does *sunena* gen.pl.¹ The evidence for *wudu* is less certain, but note that the late PsGl(K) has *wudan* gen.pl. 2×.² The very late texts PeriD and PsGl(K) also both have fem. *nosan* ‘nose’ acc.pl., and JDay II has *nosan* dat.sg.;³ and there are several examples of *hand* ‘hand’ with inflexions of the *an*-declension

in late texts. Some other shifts in and out of the *an*-declension are noted in §§3.113–15&nn.

¹ Chron(D) and Ru1 have nom.pl. *sumas* (2×, 1× respectively).

² There is a frequently occurring formula in charters *on wudan and on feldan*.

³ But Beo 1892, 2803 <nosan> is to fem. *nōse* ‘promontory’ of the *an*-declension, see Fulk, Bjork and Niles (2009: 221).

3.142 Examples of the transfer of mutation plurals to the *as*-declension and the *a*-declension, the choice being determined by gender, may be found in §§3.126–7, and discussion of a similar transfer of the historical *nd*-stems occurs at §3.131. Some light-stemmed nouns of the *an*-declension, in particular *lufu* ‘love’, transfer to the *a*-declension, see §§3.75n1. This shift, which is almost exclusively WS, is discussed in §3.106.

3.143 In late charters, *dīc* ‘dike, ditch’ is sometimes transferred to the *an*-declension, usually with change of gender, but cf. Ch 272 (Birch 390) 2.23 *þære dīcan*. Cf. Ch 1026 (Finberg) 16, where *þām ealdan dīc* (an endingless locative) occurs beside *ðære ealdan dīc* (also endingless!). See further §§2.12, 3.135. Likewise fem. *bēce* ‘beech’ is very often declined according to the *a*-declension, with change of gender. Other changes of declension are more sporadic, e.g. *brōc* declined alternately according to the *a*- and *an*-declensions in Ch 1034; but they are commoner in charters than in literary texts, suggesting that charters better reflect the actual state of the language late in the period than literary texts, on which point see Sandred (1991: 10).

VII Nominal compounding

3.144 In PGmc, dithematic nominal compounds were formed by combining two stems, the second always a nominal stem, the first a noun, adjective, or particle.¹ The first constituent was uninflected for case or number, e.g. **xwaitja-melwan* > OE *hwæt-melu* ‘flour’, **brūði-ġumōn* > *brȳd-guma* ‘bridegroom’.² Originally, the first constituent might be a bare consonant-stem, so that there was no connecting vowel between the constituents, as with **brōþur-þanōn* > OE *brōðor-bana*; but at a later date non-vocalic stems were replaced by vocalic stems when they were used as initial constituents, e.g. in Got *mana-sēþs* ‘humankind’, cf. Got *n*-stem/root-stem *manna* ‘human’. The same method of compounding persisted into OE, though by then the stem-final vowel had in most instances been syncopeated.³ Eventually, however, there arose compounds in which the first constituent was inflected. *Dōmes-dæg* ‘Doomsday’ is usually thought to be an example of such, though whether it was ever a true compound during the OE period is debatable, since syntax is not a wholly reliable indicator.⁴ However, at least

some place-names with inflected first constituents must have been compounds at a relatively early date, since anteconsonantal, constituent-final *-n-* of *an*-declension forms appears to have been lost on a phonological basis in Kentish, especially before *h*, e.g. in *Offa-hām*, from **Offan-hām*.⁵

¹ Compounds containing three noun stems also occur, e.g. *wulf-hēafod-trēo* ‘gallows’, *eofor-hēafod-seġn* ‘boar’s head banner’. See Fulk, Bjork and Niles (2009: 196).

² For details, see Carr (1939). For *ō*-stem first constituents, a stem in *-a-* was used, e.g. **þeuda-landan* > OE *þēod-land* ‘country’.

³ See Hogg (1992b: §6.21) on certain exceptions. The variable treatment of the *jō*-stem elements *hild(e)-*, *hell(e)-*, *sibb(e)-* in poetry is conditioned on a combination of morphological and metrical bases: see the discussion in Fulk (2007a: 304–14), with references.

⁴ For discussion and references, see Fulk, Bjork and Niles (2009: 322–3).

⁵ See Sandred (1988). Likewise, Kniezsa (1984) discusses changes at the point of juncture, especially in place-names, in ChronE, e.g. vowel reduction and loss, epenthesis, and various consonant changes.

3.145 In true compounds, the constituents preceding the inflexion are free morphemes, whilst this is not so of derived compounds, e.g. *sibsum* ‘peaceable’, *æðeling* ‘prince’. The difference is detectable phonologically: vowels in the second constituents of derived compounds are not infrequently treated the way unstressed vowels are treated, e.g. **burz-isl-* > *byrgels* ‘tomb’; also *westward* alongside *westweard*, see Hogg (1992b: §6.7). In addition, derived compounds are treated differently in the metre of poetry, where derivational morphemes, unlike the latter constituents of true compounds in most verse types, may appear in metrical drops, e.g. GenA 1816 *flēah wærfæst wēan*, ChristC 1627 *þæt is drēamleas hūs*, GuthA 763 *þæt we wīsdom ā*. As the examples illustrate, even derivational morphemes that do not show phonological reduction may receive unstressed metrical treatment.¹ But true compounds could become lexicalized, often with similar results, e.g. *hlāford*, cf. PPs 104.17 *hlāf-wearde* ‘lord’; *lāreow* alongside *lār-þēow* ‘teacher’. When the initial constituent is not a free morpheme, generally there is no phonological reduction of the second, e.g. *ūðwita* ‘prophet’ and derived forms in *un-* ‘not’. Such forms, nonetheless, are not treated metrically the way true compounds are: cf., e.g., GenA 30 *þe þone unnræd ongan*, Dan 323 *þæt his unvrīm ā*. Not all forms that might be analysed as true compounds, on the basis of the free status of the constituent morphemes, are so to be analysed, especially when one of the morphemes is not a major class word, e.g. compounds in *æt-*, *wiðer-*; also *-leas* and similar. Dithematic personal names, in particular, are like derived compounds, often with phonological changes in their second constituents characteristic of unstressed syllables, e.g. names in *-ferþ* (Angl *-friþ*) and *-werd*, *-ward* alongside *-weard*.² Regardless of whether or not they evince phonological reduction, they are generally treated metrically the way derived compounds are, e.g. Beo 457b *wine mīm Bēowulf*,

277 *ic þæs Hrōðgar mæg*, though there are also instances of stressed treatment of uninflected second constituents, e.g. Beo 396 *Hrōðgar gesēon*, on which see Fulk (1992: §§210–11).

¹ But derivational morphemes sometimes receive secondary stress, as well, e.g. in Beo 1720b *drēamleas gēbād*, 2680 *Nægling forbærst*. For discussion, see Fulk (1992: §§210–11), and cf. Russom (2001).

² The numismatic evidence of the mid-eleventh century is particularly plain in this regard: see Colman (1984: 126–36).

3.146 Non-inflexion of initial constituents, see §3.144, is not of itself sufficient to distinguish compounds from non-compounds, and in many instances the two cannot be differentiated conclusively. What appears to be an initial constituent may be simply a Ø-inflected word. Beo 1558, 2616, 2979 *eald-sweord* could be two words, but comparison to indubitable compounds like *gūðsweord*, *wæggsweord* suggests a compound, an assumption supported by a small degree of metrical probability, see Fulk, Bjork and Niles (2009: 323). The DOE, for example, does not regard *eald-sweord* as a compound, nor *eald-metod*, *eald-gewinna*, but it admits a number of other compounds in *eald-*, including *ealdfæder*, *ealdgesegen*, *ealdgesīð*, *ealdgestrēon*, *ealdgewyrht*, and *ealdhlāford*. In verse, on the basis of metre, an uninflected numeral must frequently be regarded as forming a compound with *hund* ‘hundred’, e.g. in GenA 1193 *and nigonhund ēac*, where *-hund* must receive no stress. Metre also tells in favour of regarding a numeral before *nihþ* ‘night’, and possibly *dæg* ‘day’, as compounded, see §4.87n7. Whether an uninflected numeral before any other noun is to be regarded as compounded cannot be determined on the basis of metre.

3.147 Chiefly on the basis of the subsequent history of the language, it may be inferred that a fricative at the end of an initial constituent behaves the same way in regard to voicing as a medial fricative in a simplex: it is voiced between voiced segments, otherwise unvoiced. Thus, the constituent-final fricative is voiced in compounds like *self-myrdrun* ‘suicide’, *fūs-lēoð* ‘dirge’, *eorð-denu* ‘valley’, *sorg-word* ‘lamentation’ and quasi-compounds like *self-lič* ‘egotistical’, *fūs-lič* ‘ready’, *eorð-lič* ‘worldly’, *sorg-lič* ‘miserable’, whereas it is voiceless in compounds like *luf-tācen* ‘love-token’, *hūs-stede* ‘homestead’, *bæð-hūs* ‘bathhouse’, *sorg-stafas* ‘anxiety’ and quasi-compounds like *luf-sum* ‘loving’, *hūs-scipe* ‘house(hold)’, *eorð-fæst* ‘fixed in the earth’, *sorg-ful* ‘sorrowful’.¹ Variation seems to have been of the same sort before inflexions, since [x] is frequently lenited and lost before inflexions with voiced initials, e.g. *hēane* acc.sg.masc. ‘high’, *hēara* gen.pl.

¹ For the evidence, see Fulk (2002), where questions are raised about the syllable-final devoicing of fricatives discussed in Hogg (1992b: §7.61).

Adjectives, Adverbs and Numerals

I Introduction

4.1 As in other Gmc languages, adjectives in OE have a double declension which is syntactically determined. When an adjective occurs attributively within a noun phrase which is made definite by the presence of a demonstrative, possessive pronoun or possessive noun, then it follows one set of declensional patterns, but when an adjective is in any other noun phrase or occurs predicatively, it follows a different set of patterns, see further §4.2. The set of patterns assumed by an adjective in a definite context broadly follows the set of inflexions for the *n*-stem nouns, whilst the set of patterns taken in other (indefinite) contexts broadly follows the set of inflexions for *a*- and *ō*-stem nouns.¹ For this reason, when adjectives take the first set of inflexions they are traditionally called weak adjectives, and when they take the second set of inflexions they are traditionally called strong adjectives. Such practice, although practically universal, has less to recommend it than may seem to be the case, both historically and synchronically. Historically, see further §§4.9–13, some adjectival inflexions derive from pronominal rather than nominal forms; synchronically, the adjectives underwent restructuring at an even swifter pace than the nouns, so that the terminology ‘strong’ or ‘vocalic’ versus ‘weak’ or ‘consonantal’ becomes misleading. For this reason the two declensions of the adjective are here called ‘indefinite’ and ‘definite’, following Quirk and Wrenn (1957: §50). Quantifiers, such as *eall* ‘all’, *moniġ* ‘many’, are mostly morphologically identical to other adjectives,² and they are therefore for the most part silently included in the following discussion. Numerals, although they present many of the same forms as adjectives, have some characteristics of their own, and they will therefore be discussed separately below. Both present and past or passive participles of verbs inflect normally as adjectives.³

¹ *Wona* ‘lacking’ and *gewuna*, *bewuna* ‘accustomed’, mostly used only predicatively, are in general indeclinable, but some inflected forms can be found.

² But *fela* ‘many’ is indeclinable, see §2.71.

³ In this work, ‘past participle’ refers indiscriminately to past and passive participles, i.e. to second participles.

4.2 There are some general rules which modify the contrast between indefinite and definite adjectives outlined in §4.1.¹

- (i) Comparative forms of the adjective are always declined definite, but this is not true of superlatives except those with suffixal *-mest*, see §4.75.
- (ii) Quite frequently, definite forms of the adjective are used in vocative constructions without a demonstrative or possessive, and this is to be expected (since the NP as a whole is semantically definite), but in poetry the same usage may be found in other contexts, too, e.g. Beo 1792 *gamela Scýlding* ‘ancient Scylding’ = ‘Hrothgar’.²
- (iii) After *ān* and *sum* and other quantifiers including numerals, indefinite forms of the adjective are normal.

¹ For more precise details and discussion of the types of variation, see Mitchell (1985: §§97–141). Particularly important in the present context are his remarks on the merger of the inflexions *-um* and *-an*.

² At one time this usage was generally held to be of firm chronological significance, see Lichtenheld (1873), Barnouw (1902). Subsequent research came to the conclusion that such claims should be laid to rest, see Funke (1949), Amos (1980), the former apparently unknown to the latter. Yet the faults of the chronological arguments do not invalidate them as entirely as has sometimes been supposed. Although it is true that a chronology of OE verse cannot be constructed on the basis of this usage, a high incidence of definite adjectives in indefinite constructions remains a probable indication of early composition, even if, conversely, a low incidence proves nothing about late composition: see Mitchell (1985: §114), Fulk, Bjork and Niles (2009: cxlix–cl).

4.3 In the remainder of this chapter we deal with the relevant topics in the following order: (1) the indefinite declension; (2) the definite declension; (3) comparison of adjectives and adverbs;¹ (4) numerals.

¹ Adverbs are naturally uninflected for case and number in OE, and they show no regular suffixal variation except among the suffixes indicating the positive, comparative and superlative degrees.

II Indefinite (strong) adjectives

1 Historical origins

4.4 In PGmc the declension of indefinite adjectives was formed by the addition of the same set of vocalic suffixes as are added to the roots of

nouns of the vocalic stem classes, see §§2.1–2 for details of the formation. Within this structure, in the very earliest stage of the Gmc protolanguage, wherever an adjective belonged originally to the *a*-stems, the thematic vowel *-a-* concluded the stem to which the masc. and neut. inflexions were added, whilst the corresponding fem. inflexions were added to suffixal */o:/ from the parallel *ō*-stems, with the exceptions discussed in §§4.9–13. Just as in the corresponding nouns, however, see §2.1, the distinction among root, stem-forming suffix, and inflexion began to be obscured at a very early date. Naturally, there also occurred adjectives belonging to the sub-classes of *ja-ljō*-stems and *wa-lwō*-stems.¹ In the event that indefinite adjectives were originally either *i*-stems or *u*-stems, they came to acquire the endings of *a*-stems and *ō*-stems, see §§4.5–8.

¹ For the sake of brevity we shall refer to *a-lō*-stems and the corresponding forms with preceding *j-* or *w-* simply as *a*-stems and *ō*-stems.

4.5 Few traces of either *i*-stems or *u*-stems remain in any of the Gmc languages, even in Gothic. There, however, *i*-stems are marked by distinctive forms in the nom.sg., acc.sg.neut., and gen.sg.masc.neut., whilst in other parts of their declension they are identical to *ja*-stem adjectives. In Gothic also, *u*-stem adjectives have distinctive forms in the nom.sg.,¹ but elsewhere they have the forms of the *ja*-stems, see for both classes Wright (1954: §§233–6). It is plain, therefore, that the process of reducing the variety of stem classes for adjectives to a single declension was already well under way at an early stage of Gmc, see further §4.7n2.

¹ And also, therefore, in the acc.sg.neut.

4.6 By the OE period, assimilation by all the indefinite adjectives of a uniform set of inflexions was virtually complete. Thus, although it is customary to distinguish *ja*- and *wa*-stems from the simple *a*-stems, it is plain that in a synchronic analysis all the adjectives, with the few exceptions noted below, share a single set of inflexions and allomorphic variations and that the different historical origins of these three types are determinable from the particular allomorphies which they display. As elsewhere in Gmc, the *i*-stems have assimilated completely to the general declension, see §4.7 for further discussion. The *u*-stems have also been so assimilated, with few exceptions.¹

¹ The most frequent exception is *cucu* ‘alive’ nom.sg., which form is regular in Ælfric and from which acc.sg.masc. *cucen(n)e* is formed. Other WS forms showing an original *u*-stem formation include Lch II *cucune* alongside nom.sg. *cwic* and less frequent nom.sg. *cwicu*, as well as the purely phonological alternant *cucone*. But Angl always has forms of the general declension, i.e. nom.sg. *cwic*, acc.sg.masc. *cwicne*, which latter

form also occurs in Or. The form *cuçenne* is usually held to show unhistorical doubling of *n*, thus Brunner (1965: §231A3), Campbell (1977: §457n4); it is noteworthy that it appears to be more frequent in Ælfric than the expected *cuçene*. Since the other cases have been assimilated to the general declension (e.g. Or 5.130.16 *-cuçre* dat.sg.fem.), *cuçone* would have seemed anomalous for expected *cuçne* (which also occurs, as an analogical re-formation), and it may have seemed that the medial vowel could be justified only on the assumption that *-ne* was a reduction of *-nne*. On the etymology, see Bammesberger (1986a), Heidermanns (1986: 305–6). *Wlacu* ‘tepid’ appears in a minority of forms in EWS and Lch against assimilated *wlæc*.

4.7 Light-syllabled historical *i*-stems can be distinguished from the historical *ja*-stems in OE by virtue of nom.sg.masc.neut. in *-e* after a single consonant, e.g. *swiçe* ‘deceitful’, compared with nom.sg. in *-Ø* after a geminate consonant, e.g. *midd* ‘middle’. Examples of light-syllabled historical *i*-stems include: *bryçe* ‘brittle’, *ġemyne* ‘mindful’, *swiçe* ‘deceitful’, possibly *freme* ‘excellent’.¹ Heavy-syllabled historical *i*-stems, on the other hand, can be distinguished only comparatively and etymologically, and they include *blīþe* ‘joyful’, *brȳçe* ‘useful’, *ġedēfe* ‘becoming’, *ġemæne* ‘common’.²

¹ That *freme* is an adj. in OE is dubitable. There is no cognate *i*-stem adj. in Gmc, and the two proposed instances of the adj. in OE are insecure, being perhaps instances of the noun *fremu* ‘benefit’: see Fulk (2004: 620–1, 624–5), but cf. Bammesberger (2006).

² *Swēte*, *swōt* ‘sweet’ is an *u*-stem, *pace* Brunner (1965: §302A1). It is especially noteworthy here that the fem. forms of this adj. had already transferred to the *ja*-stems in both Sanskrit and Greek, thus *svādū-* masc., *svādvī* fem., ἡδύς masc., ἡδεῖα fem., showing that the process of class transfer may well have been pre-Germanic, see Prokosch (1939: 263).

4.8 All the historical *u*-stems with the exception of those noted in §4.6n1 have transferred to the general declension, but the following adjectives appear on comparative and etymological grounds to be historical *u*-stems: *eġle* ‘troublesome’, *eņge* ‘narrow’, *heard* ‘hard’, *hnesç(e)* ‘soft’, *myr(i)ġe* ‘pleasant’, *smolt* ‘tranquil’, *strang* ‘strong’, *swōt* ‘sweet’, *þyrre* ‘dry’, *twelfwintre* ‘twelve-year-old’ and other compounds of *wintre*, and probably *swær* ‘heavy’. Most of these nouns given with unumlauted vowels above have unumlauted variants, hence *hmisca*, *smylte*, *strenġe*, *swēte*, *swære*, see §4.7n2.

2 Inflexions

4.9 The general principle underlying the adjectival inflexions of the indefinite declension in Gmc is that the set of inflexions for masc. and neut. forms of adjectives is identical to the set of inflexions of the historical *a*-stem nouns and that the set of inflexions for fem. forms is identical to the set of inflexions of the historical *ō*-stem nouns. There are two exceptions to this. Firstly, as stated in §4.1, the inflexions of this declension are partly

nominal, partly pronominal in origin. The inflexions which are pronominal in origin are acc.sg.masc., dat.sg.masc.neut., gen.dat.sg.fem., nom.acc.pl.masc., gen.pl. (all genders).¹ Secondly, unlike nouns, adjectives in OE regularly retain in the masc.neut.sg. a separate inflexion for the instrumental case.

¹ On the origin of the mixture of nominal and pronominal inflexions, see Birkhan (1974, with references), whose objections, however, to the theory of suffixation with the pronoun **jas* are unconvincing.

4.10 We may reconstruct for an early stage of PGmc the following set of inflexions for this declension; cf. §§2.8, 2.13, 2.38 for the nominal inflexions and §§4.12, 5.5 for the pronominal inflexions:¹

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	*-az	*-am	*-ō
<i>Acc.</i>	*-anōn	*-am	*-ōm
<i>Gen.</i>	*-as	*-as	*-aizōoz
<i>Dat.</i>	*-umu	*-umu	*-aizai
<i>Instr.</i>	*-ei	*-ei	_____
Plural			
<i>Nom.</i>	*-ai	*-ō	*-ōoz
<i>Acc.</i>	*-ans	*-ō	*-ōnz
<i>Gen.</i>	*-aizōom	*-aizōom	*-aizōom
<i>Dat.</i>	*-omiz	*-omiz	*-ōmiz

¹ As is traditionally the practice, pronominal inflexions are typographically distinguished, in this book by the use of bold type.

4.11 Most of the nominal inflexions develop normally into OE, see §§2.8, 2.13, 2.38 for further details. Note in particular that the acc.pl. forms of all genders become identical to the nom.pl. forms.

4.12 Of the pronominal forms, none are without difficulty, but the most straightforward is acc.sg.masc. **-anōn*, which initially developed to **-ane*, see Hogg (1992b: §3.32). Then the medial **-a-* was subject to non-high vowel syncope, see *ibid.*: §§6.14–15, giving *-ne*, e.g. *blindne* ‘blind’. It may be that the gen.dat.sg. and the gen.pl. of all genders show the same syncope after early shortening of **/æ:/* (< **/ai/*) > **/æ/*, although alternatively they may be from inflexions of the type **-ežōz*, etc., cf. the OHG demonstrative *dera* and see *ibid.*: §6.15n2 for further discussion. Otherwise, these inflexions show the expected developments of their unstressed syllables; however, see further §4.13. The historical shape of the dat.sg.masc.neut. is yet more

uncertain. In Gothic the form is *-amma*, which cannot give directly the OE form, which is shared with Old Saxon and Old Norse *-om*, whilst OHG has *-emu*. If the historical form was indeed **-umu*, then the final vowel would have been lost regularly after two or more syllables, see *ibid.*: §3.29, and the quality of the medial vowel may have been influenced by the dat.pl., see Prokosch (1939: 276).

4.13 The set of OE inflexions which would develop by the processes described above and in accordance with the development of the nominal inflexions as considered in chapter 2 is as follows:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	-∅	-∅	-u
<i>Acc.</i>	-ne	-∅	-e
<i>Gen.</i>	-es	-es	-re
<i>Dat.</i>	-um	-um	-re
<i>Instr.</i>	-e	-e	_____
Plural			
<i>Nom.</i>	-e	-u	-a
<i>Acc.</i> ¹	-e	-u	-a
<i>Gen.</i>	-ra	-ra	-ra
<i>Dat.</i>	-um	-um	-um

In the acc.sg.masc., gen.dat.sg.fem and gen.pl., the historically initial vowel of the inflexion, i.e. in **-ane*, **-ere*, **-era* would always have been subject to syncope, see Hogg (1992b: §§6.14–15) and §4.12 above. This historical change is probably subject to restructuring in the synchronic context, see further §4.35.

¹ On acc.pl. forms, see §4.11.

4.14 The earliest OE texts evince a number of spellings which indicate earlier forms of the inflexions listed in §4.13. In particular, early texts quite often have *-æ* for *-e* as in EpGl, ErfGl *frōdræ* ‘aged’ gen.sg.fem., RuthCr *riicnæ* ‘powerful’ acc.sg.masc. Also in early texts, the instr.sg. inflexion is sometimes recorded as *-i*, as in EpGl *-num(i)ni* ‘taken’.¹

¹ For references to controversy over this instr. *-i*, see Fulk, Bjork and Niles (2009: 202, note to Beo 1382), especially the article by Bammesberger cited there.

4.15 The inflexions listed in §4.13 lead to paradigms of the following type, exemplified by *sum* ‘some, a certain’:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	sum	sum	sumu
<i>Acc.</i>	sumne	sum	sume
<i>Gen.</i>	sumes	sumes	sumre
<i>Dat.</i>	sumum	sumum	sumre
<i>Instr.</i>	sume	sume	_____
Plural			
<i>Nom.</i>	sume	sumu	suma
<i>Acc.</i>	sume	sumu	suma
<i>Gen.</i>	sumra	sumra	sumra
<i>Dat.</i>	sumum	sumum	sumum

This type of paradigm, however, is frequently subject to modification of one type or another in all dialects, and such modifications are discussed in the following paragraphs.

4.16 In EWS the most significant feature of the paradigm is that the nom.acc.pl. of fem. adjs. often has inflexional *-e* rather than *-a*, although the latter remains in the majority, cf. §2.40 for the contrasting situation amongst the equivalent fem. nouns. Inflexional *-e* is also found for the nom.acc.pl. of neut. nouns of all types, e.g. *sume*, *ealle*, *moniġe*, *sceamlice*, etc., alongside regular *-u* or \emptyset .¹ Occasionally, EWS texts show an epenthetic vowel in gen.dat.sg.fem. *sumere* alongside *sumre*. These minority developments in EWS are forerunners of a more widespread restructuring of the inflexional system in LWS, see §4.17.

¹ The alternation between *-u* and \emptyset is due to apocope, see further §4.41.

4.17 The most significant feature of the LWS paradigm is that the inflexions of the nom.sg. and of the nom.acc.pl. become uniform for all genders, see Pope (1967–8: I, 184). This results in zero-inflected forms in the nom.sg. of all genders, and *-e* as the marker of nom.acc.pl. in all genders.¹ To some extent this may be the result merely of the spread of inflexional forms already found in EWS, as with the use of *-e* for nom.acc.pl.fem. A further cause may be the functional loss of a synchronic rule of apocope, see further §4.43, which would apply to the nom.sg.fem. and the nom.acc.pl.neut. But perhaps more important than the apparently scattered range of causes is the consequence that all adjectives then decline in the plural without distinction of gender.² Other changes apparent in LWS include in particular the widespread presence of an epenthetic vowel in the gen.dat.sg.fem. and the gen.pl., hence *sumere*, *sumera*. Such forms occur equally with heavy-stemmed adjectives, e.g. *gödere*, *gödera*, and are overwhelmingly predominant in

Ælfric and also in most other LWS texts. Furthermore, the instr.sg.masc.neut., which remained in EWS, is lost except in set phrases of the type *ælc̄e dæg* ‘every day’, cf. §2.18. The quite significant and systematic differences between EWS and LWS are most clearly demonstrated by displaying the normal paradigm of these adjectives in LWS:

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	sum	sum	sum	sume
<i>Acc.</i>	sumne	sum	sume	sume
<i>Gen.</i>	sumes	sumes	sumere	sumera
<i>Dat.</i>	sumum	sumum	sumere	sumum

¹ The most important exception to this statement is *manega* ‘many’ nom.acc.pl., also *fēawa* ‘few’. These two are no doubt semantically linked, and the presence of *-a* in these words may well be due to indeclinable *fela* ‘many’, as implied by Pope (1967–8: I, 184).

² This process of neutralization of gender seems to have progressed more rapidly in the past participle used in periphrastic constructions (perfect or passive) than elsewhere, although EWS has a number of examples in which gender distinctions remain, as at CPLetWærf 13 *wæs oðfeallenu* ‘had declined’ nom.sg.fem. Pope (1967–8: I, 184) notes that in his texts the past participle with *habban* is uninflected except at ÆHom 22.466 *abedene* acc.pl. from *abiddan* ‘pray for’, although it is inflected after *bēonlwesan* and *wurðan*, though without distinction of gender.

4.18 In INbr the picture is often difficult to discern, both because of the arbitrary habits of the glossators and because of the variations of the unstressed vowels, see firstly Lindelöf (1890: §62). In the nom.sg.fem. there is variation between the historical inflexion *-o* (< *-u*) and *-e*, *-a*, and the situation is not dissimilar in the nom.acc.pl. without obvious distinction of gender, *-o* being the commonest variant in the NNbr texts. A dat.sg.masc.neut. inflexion *-e*, taken from the nominal declension, occurs alongside *-um*. But perhaps the most notable characteristic of this system is the use of uninflected forms throughout the sg., which is a feature of Li, although not of the other INbr texts. An important exception to this is that the inflexion of the gen.sg. for all genders is *-es*, although DurRitGl also infrequently has *-re*. Insofar as can be determined from the evidence, the SNbr Ru2 shows a rather more conservative system, especially in the absence of uninflected forms except in the nom.sg. (and the acc.sg.neut.), see Lindelöf (1901: §§178–80).

4.19 In the PsGl(A) dialect of Merc, the system of inflexion is considerably more conservative, and the principal departure from the system presented in §4.15 is that the nom.acc.pl.fem. inflexion is *-e*, as should be expected on the basis of the parallel nouns, see §2.40. The same inflexion is also found in nom.acc.neut.pl. of past participles, thus showing an initial stage

in the same loss of gender distinction noted in §4.17 for LWS. The later Ru1 has adopted *-e* as the regular neut.pl. inflexion, and in addition a minority of forms in the sg. are without inflexion, partly paralleling the situation which arose in lNbr, see §4.18.

4.20 The inflexions of Kt generally follow the same pattern as in WS, and in the lKt gloss OccGl 49 the inflexions are generally identical to those of LWS. However, it should be noted that an epenthetic vowel is present before *-re*, *-ra* only in OccGl 49.159 *swēsere* dat.sg. of *swāes* ‘pleasant’. The nom.acc.pl.fem. inflexion is always *-e* except in 359 *dīohla* ‘secret’, 788 *fētto* ‘fat’ and 175, 476 *manega* ‘many’, of which only the last may be significant, cf. LWS *manega* cited in §4.17n1.

3 *Allomorphic variation*

4.21 The basic pattern of indefinite adjective declension has been given in the preceding sections, but there are several types of allomorphic variation which must be considered. These allomorphic variations are, naturally, almost entirely parallel to those for nouns of the *as*- and *a*-declensions, see for details §§3.12–72, 3.81–104 respectively. Since that is the case, we shall consider the relevant variations in, as far as is possible, the same order as was employed for the nominal declensions.¹ Also, where the pattern of allomorphic variations in this declension is not significantly different from that found amongst nouns, as, for example, in the case of palatalization, see §§3.18–20, 3.85, we shall silently pass over the topic here.

¹ But wherever possible we shall conflate the discussion of the same allomorphic variation when it applies to both masc./neut. adjectives and fem. adjectives.

(a) *Restoration of \tilde{a}*

4.22 Following the situation in *as*-declension nouns, see §3.14, it should be expected that indefinite adjectives which have stem-vowel /æ/ in the nom.sg.masc. would show a shift to /a/ before an inflexion containing a back vowel but would retain /æ/ elsewhere, hence nom.sg.masc. *hwæt* ‘active’, but dat.sg. *hwatum*. However, the normal paradigm of this type of noun is as follows in LWS:^{1,2}

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	hwæt <i>active</i>	hwæt	hwæt	hwate
<i>Acc.</i>	hwætne	hwæt	hwate	hwate
<i>Gen.</i>	hwates	hwates	hwætre	hwætra
<i>Dat.</i>	hwatum	hwatum	hwætre	hwatum
<i>(Instr.</i>	hwate	hwate)		

Examples of adjectives which pattern similarly are: *bær* 'bare', *blæc* 'black', *glæd* 'glad', *hræd* 'quick', *læt* 'slow', *sæd* 'sated', *smæl* 'slender', *stræc* 'strict', *wær* 'wary'.

¹ The variation of stem vowel in EWS follows the same set of rules as in LWS. The instr.sg. is given in brackets to show that it is taken from EWS forms.

² Several of the forms in the paradigm do not appear to be recorded; in particular, *hwætre*, *hwætra* are not to be found in the *DOEC*, either as simplices or as the second element of compounds. They may be inferred from the occurring forms of other adjectives of the same type, but see §4.24 for further comment.

4.23 The distribution of /æ/ and /a/ in the paradigm of §4.22 appears to be quite regular, for /æ/ appears only in a closed syllable and /a/ only in an open syllable.¹ An explanation of this distribution is, however, difficult, as is noted by Girvan (1931: §28a2), see also Hogg (1996) for more detailed discussion and references. It is certainly quite plain that the distribution is not due to levelling, as suggested in, for example, Wright and Wright (1925: §54n3), since there is no reduction in allomorphic variation in the paradigm presented in §4.22 as compared with the paradigm which would have been expected under the phonological conditions for restoration of *a*.

¹ Under the assumption that syncope in gen.dat.sg.fem. and gen.pl. has already occurred, see §4.12 and, for some discussion of the synchronic status of such syncope, §§4.47, 4.55.

4.24 Although the type of paradigm presented in §4.22 seems quite regular for Ælfrician texts and other texts of the late period, some late texts often show /æ/ throughout, although in these instances it may sometimes be the case that <æ> and <a> are equivalent spellings.¹ In dialects other than WS the situation is somewhat different. In Nbr these adjectives have almost exclusively /æ/ throughout their paradigm, the principal exception being LiEpis 20 *blaccum* 'black' dat.sg.masc.; cf. also LkGl(Li) 24.25 *hlætto* 'slow' nom.pl.masc.² In Merc the situation is altered by the effects of second fronting, as in PsGl(A) 13.3 *breðe* 'quick' nom.pl. For Kt note OccGl 49.665 *bred* with Kentish raising, see Hogg (1992b: §§5.189–91).

¹ However, this can hardly be so in the case of Beo 58 *glæde* acc.pl.masc., on which see Fulk, Bjork and Niles (2009: 117). Elsewhere in the poem we find dat.sg. *gladum*.

² On the unhistorical initial *h*, see Hogg (1992b: §7.48).

(b) Loss of [x]

4.25 In broad outline, the indefinite adjectives with final [x] show the same set of patterns as the corresponding masc./neut. nouns discussed in §§3.25–9 and the few fem. nouns of this type discussed in §§3.88–9. As with nouns,

loss of [x] could occur either after a vowel or after a liquid consonant. In either event, [x] would be lost between voiced segments, including, it is important to note, sonorants, but it would be retained word-finally.

4.26 The typical paradigm in LWS of such an adjective with [x] after a vowel may be exemplified by *hēah* ‘high’. This paradigm shows a number of significant variations from the paradigm typically found in EWS and also from that which would be expected phonologically (insofar as these are different, see §4.27), and these variations are discussed in §4.27 and §4.28 respectively.^{1,2}

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	hēah <i>high</i>	hēah	hēah	hēage ³
<i>Acc.</i>	hēahne	hēah	hēage ⁴	[hēage]
<i>Gen.</i>	[hēages]	[hēages]	hēahre	[hēahra]
<i>Dat.</i>	hēagum	hēagum	hēahre	hēagum

Adjectives which decline in a similar manner include *fāh* ‘hostile’, *flāh* ‘deceitful’, *gemāh* ‘depraved’, *hrēoh* ‘rough’, *nēah* ‘near’,⁵ *scēoh* ‘shy’, *tōh* ‘tough’, *brōh* ‘rancid’, *an-*, *gewlōh* ‘fruitful’, *wōh* ‘crooked’.⁶ Note that there are no light stems of this sort.

¹ A number of forms are absent from Ælfrician texts and even from other LWS texts. Such forms are presented in square brackets in the paradigm, usually on the basis of similar forms in the definite (weak) declension.

² The paradigm given here is the type which is regularly found in Ælfrician texts. Some other LWS texts do not show this paradigm, see §4.28, and hence they do not appear to have undergone the kind of restructuring which is discussed in §4.29.

³ ÆLS (Julian and Basilissa) 286 (nom.pl.masc.).

⁴ ÆLS (Christmas) 22.

⁵ Usually an adverb, but occasionally an adjective, as in PrudGl 1.890 *nēahne*.

⁶ *Rūh* ‘rough’ may show either the alternation *h ~ g* or the alternation *h ~ w*, parallel to nouns such as *holh* ‘hollow’, see §3.29.

4.27 In EWS the more usual paradigm of the adjectives of the same type was as follows:

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	hēah	hēah	hēa	hēa
<i>Acc.</i>	hēane	hēah	hēa	hēa
<i>Gen.</i>	hēas	hēas	hēare	hēara
<i>Dat.</i>	hēam	hēam	hēare	hēam

This paradigm is in every respect phonologically expected. All the forms without post-vocalic [x] are the result of loss of [x] between a vowel and

another voiced segment, whether vocalic or, as in *hēane*, *hēare*, *hēara*, consonantal. In the cases in which a vowel followed [x] which was lost, the unstressed vowel of the inflexion was lost in hiatus, hence nom.sg.fem. *hēa* < **hēa-u* < **hēahu*, gen.sg.masc./neut. *hēas* < **hēa-es* < **hēahes*, etc. Thus, the allomorphic variations in the paradigm can be straightforwardly handled by synchronic rules which are the direct equivalents of the historical sound changes, cf. the similar situation for nouns described in §3.26. There are in EWS only a few scattered examples of variation from the above paradigm, notably CP(H) 443.36 *hēah* acc.pl., in which *h* would appear to have been restored on the analogy of the nom.sg., but see the discussion of LWS forms in §4.28, and CP(C) 80.13 *hēanne* (beside CP(H) *hēane*), which would appear to be a re-formation on the basis of *hēah* to *hēahne* with subsequent assimilation of *hn* > *nn*.¹

¹ This is the usual explanation, as in Luick (1914–40: §649.7), Campbell (1977: §484). It is not necessarily incompatible with the fact that the usual LWS form is *hēahne*, especially if the explanation for this given in §4.29 is correct. An alternative view is held by Weyhe (1925: 316).

4.28 Some non-Ælfrician LWS texts inflect adjectives like *hēah* the way Ælfric does, as in the paradigm in §4.26, e.g. *hēahne* in LS 8, WSCp, BenRW. Such texts tend to exhibit few of the Angl characteristics that are so common in some non-Ælfrician LWS texts. Contracted forms like those exhibited by the EWS paradigm in §4.27 tend to occur in LWS texts with notable Angl features, such as *hēa* in HomS 10, HomS 40.1–3, LS 25.¹

¹ On the distinction between LWS homiletic texts that do and do not show many seemingly Angl features, see Fulk (2008).

4.29 It is plain that the differences between the EWS paradigm in §4.27 and the LWS paradigm in §4.26 can be accounted for only by assuming some notable restructuring. Medial [x] has become impervious to deletion and usually appears as <g>, whilst the endings are the same as for other LWS indefinite adjectives, see §§4.13, 4.17. To be sure, it cannot be determined for certain that *-e* has been generalized to all genders in the nom.acc.pl., since the only relevant example in Ælfric of *hēah* or of any of the other, similar stems listed in §4.26 is masculine, see §4.26n3.¹ Assumption of *-e* for all genders, however, seems safest. This suggests the following set of inflexions for all indefinite adjectives in Ælfric, including those in *-h*:²

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	-∅	-∅	-∅	-e
<i>Acc.</i>	-ne	-∅	-e	-e
<i>Gen.</i>	-es	-es	-re	-ra
<i>Dat.</i>	-um	-um	-re	-um

Even assuming the above set of inflexions, it is still necessary to suppose that further restructuring has taken place. Thus, *dat.sg.pl. hēagum* might be derived from underlying */hæaxum/ if it were assumed that */x/ is preserved and in this declension not subject when between voiced segments to lenition to [h] and then loss, see Hogg (1992b: §§7.45–51, esp. §7.49). Then */x/ would be subject to intervocalic voicing. This is not a very satisfying solution, as the voicing rule would seem rather ad hoc, and it could not be conditioned convincingly on a purely phonological basis, since, for example, although *hēagre* occurs 3 times in (non-Ælfrician) LWS, beside *hēahre* (10×, in Ælfric and elsewhere), there is no ***hēagne* beside *hēahne* (31×). Thus, a better solution is to suppose that *hēah* has been reanalysed as underlying /hæaγ/, with devoicing of /γ/ word-finally and, perhaps, syllable-finally.³ The devoicing rule need not be assumed to have applied sporadically under this analysis, since it is plain that <g> and <h> are interchangeable graphs when representing [γ] and [x], see *ibid.*: §7.64, and use of one or the other may depend more on scribal traditions than on phonetic correspondences. Scribal tradition at all events seems a necessary assumption in order to account for the absence of ***heagne* whilst *hēagre* is attested.

¹ But cf. WHom 10c 88 *wōge* ‘crooked’ acc.pl.fem.

² It would appear possible to permit final *-u* to remain, at least in the nom.sg.fem., for this could be deleted by apocope, on which see §§4.41–3. That is, uninflected *hēah* in the nom.sg.fem. would result naturally from /hæaγ+u/ by high vowel apocope followed by fricative devoicing. Significantly, there are no adjectives with stem-final *-h* after a short vowel, see §4.26, so that the behaviour of inflexional *-u* under such circumstances cannot be determined, i.e. whether it would have been preserved as such or whether there would have been loss of intervocalic [x] followed by vowel contraction, or whether all adjective stems in *-h* came to be zero-inflected in the nom.sg.fem. But since final *-u* never appears on surface forms in LWS, surely it is preferable to assume that the inflexions were the same for stems in *-h* as for other stems, and there was zero inflexion in all nom.sg.fem. adjectives, both light and heavy stems. This also accords better with the supposition that apocope had been lost as a phonological rule in LWS declension, see §4.43.

³ See Hogg (1992b: §7.60), but cf. Fulk (2002), where reasons are offered to doubt that devoicing of fricatives applied anywhere except word-finally, and apparent instances are instead to be attributed to the interchangeability of non-initial <g> and <h> due to the allophonic status of [γ] and [x].

4.30 There are few adjectives with [x] after a liquid: *þweorh* ‘crooked’, *sceolh* ‘oblique’, the latter of which occurs only with definite (weak) inflexions.¹ The paradigm of *þweorh*, insofar as it can be determined, is as follows:

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	þweorh	þweorh	þwëoru ²	þwëore ³
<i>Acc.</i>	þweorne	þweorh	þwëore	þwëore
<i>Gen.</i>	þwëores	þwëores	þweorre	þweorra
<i>Dat.</i>	þwëorum	þwëorum	þweorre	þwëorum
<i>Inst.</i>	þwëore	þwëore	_____	_____

Compare this declension with the declension of a similarly structured noun, e.g. *mearb* ‘horse’, see §§3.25ff.

¹ *Gefearh* occurs only in collocation with *sugu*, perhaps as a compound, with the meanings ‘pregnant sow, calf’.

² But in LWS this is usually *hwëor* with apocope, see §4.42(b).

³ The nom.acc.pl.neut. forms are *hwëoru*, LWS *hwëor*, the latter with apocope, see n2.

(c) *Nominative singular in -e*

4.31 A large number of adjectives have their nom.sg. in *-e*, as with *wilde* ‘wild’. In Gmc these adjectives were mainly heavy *ja*-stems, but in OE they have assimilated their paradigms to original *a*-stems such as *sum* ‘some’. Also to be included in this group are original Gmc *i*-stems, whether with a light or heavy stem, see §4.33 for examples. In most respects these adjectives appear to parallel the equivalent *as*-declension nouns such as *ende* ‘end’ which have *-e* in their nom.sg. Nevertheless, it should not be assumed that these adjectives uniformly share the morphological structure of the equivalent nouns, see §§4.34–5 for discussion of the relevant issues.

4.32 A typical paradigm of an adjective of this type in LWS is as follows:

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	wilde <i>wild</i>	wilde	wilde	wilde
<i>Acc.</i>	wildne	wilde	wilde	wilde
<i>Gen.</i>	wildes	wildes	wildre	wildra
<i>Dat.</i>	wildum	wildum	wildre	wildum

Amongst the large number of adjectives with similar paradigms are the following:¹ *æþele* ‘noble’, *brēme* ‘famous’, *cēne* ‘bold’, *clæne* ‘clean’, *cýme* ‘becoming’, *dēore* ‘dear’, *drýge* ‘dry’, *dyrne* ‘secret’, *ēce* ‘eternal’, *fæcne* ‘deceitful’, *gīfre* ‘greedy’, *grēne* ‘green’, *līþe* ‘gentle’, *mære* ‘famous’, *rīce* ‘powerful’, *sēfte* ‘soft’, *sýfre* ‘sober’, *gesýne* ‘visible’, *wēste* ‘waste’, *wyrþe* ‘worthy’, *yrre* ‘angry’. In addition to these, there are adjectives of this type formed with a number of frequent suffixes, including the following:

- (a) *-bære*, as in *lustbære* ‘agreeable’, *wæstmbære* ‘fruitful’;²
- (b) *-ede*, as in *höcede* ‘hooked’, *hringede* ‘ringed’;
- (c) *-ihtē*, as in *stānihte* ‘stony’, *þyrnihte* ‘thorny’;³
- (d) *-wende*, as in *hālwende* ‘healing’, *hātewende* ‘hot’.

By far the largest subgroup of adjectives of this type is the present participles of verbs which have the form stem + *-ende*, see §6.28 for details.

¹ A small number of words which belong to this type show mainly historical irregularities of one sort or another, including the following: (a) *nūwe*, which appears to have been transferred to this group despite having originally an initial light syllable, see Dahl (1938:106–7) for discussion; (b) *frēo* ‘free’ has an alternative nom.sg. *frīg* and hence variant forms such as gen.sg. *frīges*, *frēos*; the first member of each pair is the historically expected form, see Hogg (1992b: §4.9(1)) for further discussion; (c) *earfeþe* ‘difficult’ is a back-formation from the neut. noun meaning ‘trouble’, which had nom. pl. *earfeþu*, taken for the neut. of an adjective. As Campbell (1977: §648.4) remarks, both the noun and the adjective could be inflected as *a*-stems, with nom.sg. *earfoþ* beside *earfeþ*, for reasons explained in Hogg (1992b: §§6.5, 6.29); and the stem *earfoþ-* could then be extended to other cases of the adjective.

² For surveys of forms in *-bære*, see Matzel (1974, 1991, 1992).

³ Some of these adjectives have alternative forms without *-e*, thus *stāniht*. Also, forms with and without *i*-umlaut occur, e.g. *stāniht*, *þorniht*, see Hogg (1992b: §5.85.10(a)).

4.33 Original heavy-stemmed *i*-stem adjectives which are fully assimilated into this group in OE include the following, generally only to be distinguished from original *ja*-stems on comparative grounds: *blīþe* ‘joyful’, *brȳce* ‘useful’, *ġedēfe* ‘becoming’, *ġemāne* ‘common’. Originally light-stemmed *i*-stems can be distinguished in OE by their lack of gemination alongside *i*-umlaut, as with *bryce* ‘brittle’, *ġemyne* ‘mindful’, *swiċe* ‘deceitful’.¹

¹ Perhaps to be included here are *fyrn* ‘formerly’, almost always adverbial, and *lȳt* ‘little’, mostly a noun and an adverb, rarely, as JDay II.61 *mid lȳt wordum*, an indeclinable adjective. On *freme* ‘excellent’, see §4.7n1.

4.34 Outside LWS of the type represented in Ælfrician texts, the paradigm of these adjectives is somewhat different. In particular it should be noted that the EWS paradigm is of the following type, cf. §§4.15–16 in particular for minor variations:

	Masculine	Neuter	Feminine
Singular			
<i>Nom.</i>	wilde	wilde	wildu
<i>Acc.</i>	wildne	wilde	wilde
<i>Gen.</i>	wildes	wildes	wildre
<i>Dat.</i>	wildum	wildum	wildre
<i>Instr.</i>	wilde	wilde	————
Plural			
<i>Nom.</i>	wilde	wildu	wilde
<i>Acc.</i>	wilde	wildu	wilde
<i>Gen.</i>	wildra	wildra	wildra
<i>Dat.</i>	wildum	wildum	wildum

When the last consonant in the stem is post-consonantal and is identical to an inflexion-initial consonant, the resulting geminate is simplified, as expected, see Hogg (1992b: §7.80). For example, to *dyrne* ‘hidden’ the acc.sg.masc. inflexion *-ne* is added to produce *dyrne*, whilst there is no degemination in acc.sg.masc. *grēnne*, cf. nom.sg. *grēne* ‘green’. The adjectival compass terms, e.g. *norþerne*, *seþerne*, are in OE of the same structure and hence follow the same paradigm as *dyrne*. There also occurs syllabification of a post-consonantal sonorant before stem-final *-e* in certain adjectives of this class, including *fæcne* ‘deceitful’, *frēcne* ‘horrible’,¹ *gīfre* ‘greedy’, *lǣpre* ‘evil’, *sýfre* ‘chaste’ and possibly *dīgle* ‘secret’, although this last could equally be from *dīgol*.² Forms of these words bearing an inflexion which begins with a consonant different from the syllabifiable stem-consonant regularly show syllabification of the last consonant in the stem, hence acc.sg.masc. *lǣðerne*, dat.sg.fem. *dīgolre*, gen.pl. *dýgelra*, *frēcenna*. But other forms do not show epenthesis, hence acc.sg.masc. *fæcne*, *frēcne*, gen.pl. *lǣðra*, *-sýfra* from *fæcne* + *-ne*, *frēcne* + *-ne*, *lǣðre* + *-ra*, *-sýfre* + *-ra*.³

¹ Campbell (1977) regards this word as containing *ċ*, but deaffrication should have applied anteconsonantly, see §4.49n1.

² See Dietz (2000).

³ The LWS form ClG1 2794 dat.sg.fem *gīferre*, beside usual *gīfre*, is exceptional.

4.35 Most of the allomorphic variation which is displayed in the above EWS and LWS paradigms can be accounted for on a synchronic basis by assuming that the underlying form of the stem of these adjectives is disyllabic, i.e. of the type /wilde/, and that there is a rule which deletes stem-final /e/ before another vowel, thus exactly paralleling the equivalent *as*-declension nouns such as *ende* ‘end’.¹ The analysis of /wilde/ as the underlying stem derives support from compounds in *wilde-*, including *wildefȳr* ‘lightning’ and *wildeswīn* ‘wild boar’; *wild(d)ēor* (rarely *wildedēor*) ‘wild animal’ is no exception, as it is a folk-etymologized re-formation of *wildor*, see §2.100&n4. As for forms like acc.sg.masc. *dyrne* ‘hidden’ and *lǣðerne* ‘evil’, the variation that they show is predictable if it is assumed that the underlying shape of the stem is disyllabic as for *wilde*, e.g. /dyrne/, and that in inflected forms, stem-final /e/ is subject to non-high vowel syncope.²

¹ For example, EWS nom.sg.fem. *wildu* will be derived synchronically from underlying /wilde+u/ by ordered rules of apocope and *e*-deletion, giving the derivation /wilde+u/ → /wilde+u/ (apocope fails) → /wildu/ (*e*-deletion), cf. §3.34n2 for the parallel derivation of *witu* ‘punishments’, whilst LWS nom.sg. *wilde* will be derived from /wilde+e/. In the acc.sg.masc., gen.dat.sg. fem., and gen.pl., the forms *wildne*, *wildre*, *wildra* can be plausibly derived only from underlying forms of the type /wilde+ne/, /wilde+re/, /wilde+ra/, where it is notable that the inflexions do not begin with a vowel as they did historically, see §§4.12–13. These underlying forms will then be subject to the synchronic reflex of non-high vowel syncope in medial positions, which will delete medial /e/, see Hogg

(1992b: §§6.14–15). (Note that the difference between the historical change and the synchronic rule is in terms only of the vowel affected. In the historical change, the vowel which was subject to syncope was the initial vowel of the inflexion; synchronically the vowel subject to syncope is the final vowel of the stem. Thus, syncope itself remains unchanged, and what has changed is the morphological structure of the adjective.) If it were assumed that the relevant inflexions were the historically predicted *-ane*, *-ere*, *-era*, see §4.12, then these forms would be underlyingly of the type /wilde+ane/, from which it is difficult to justify a derivation which would delete both of the medial vowels.

² Thus, the underlying shape of acc.sg.masc *dyrne* will be /dyrne+ne/, which will give the surface form by syncope and degemination. On the other hand, from underlying /ly:θre+ne/ the result of syncope will be /ly:θrne/, where /r/ is syllabic between consonants because it is more sonorous than the preceding consonant, cf. Hogg (1992b: §6.41).

(d) *Geminate consonants*

4.36 Light-stemmed adjectives parallel to the heavy *ja*-stems discussed in §§4.31ff. should etymologically show a final geminate consonant in the nom.sg. of all genders, hence *nytt* ‘useful’ (but see §4.37). Other adjectives of the same structure include *midd* ‘middle’, *ġesybb* ‘related’. Such adjectives have structures similar to that of light-stemmed *ja*-stem nouns, see §§3.39–41, and hence there is variation between a geminate consonant intervocally and a single consonant elsewhere, e.g. *nyttes* gen.sg.masc. against *nyt* nom.sg.masc., *nytne* acc.sg.masc. This alternation can be accounted for by a straightforward rule of degemination.

4.37 The only issues concerning these adjectives which might cause difficulties concern the shape of the nom.sg. In the masc. and neut. forms, the most usual shape is with a single final consonant, although there are a number of examples with a geminate, e.g. *nytt*, notably in EWS, but also occasionally in other, later, texts. This variation is doubtless the result of orthographic influence of inflected upon uninflected forms rather than of gradualness in the implementation of the historical change of degemination of final consonants, see Hogg (1992b: §7.81). In the fem.sg. the lack of final *-u* is due to apocope, see §4.41.

(e) *Nominative singular masculine in -u*

4.38 Adjectives which have their nom.sg.masc. in *-u*, e.g. *ġearu* ‘ready’, are in origin *wa*-stems. Their paradigm in LWS is of the following type:¹

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	ġearu	ġearu	ġearu	ġearwe
<i>Acc.</i>	ġearone	ġearu	ġearwe	ġearwe
<i>Gen.</i>	ġearwes	ġearwes	ġearore	ġearora
<i>Dat.</i>	ġearwum	ġearwum	ġearore	ġearwum
<i>(Instr.</i>	ġearwe	ġearwe)		

Other nouns of this type include: *basu* ‘purple’, *calu* ‘bald’, *fealu* ‘fallow’, *geolu* ‘yellow’, *hasu* ‘grey’, *mearu* ‘tender’, *nearu* ‘narrow’, *salu* ‘dusky’.²

¹ On LWS variations from this paradigm, see §4.39.

² On *earu* ‘quick’, sometimes included here, see Toller (1921: *earu*).

4.39 The principal allomorphic variations in these nouns are between /u/ and /w/, e.g. *gearu* ~ *gearwe*, and between /u/ and /o/, e.g. *gearu* ~ *gearone*. Both of these can be simply accounted for by assuming the same type of underlying structure as for the equivalent nouns of the *as*-declension, e.g. *bearu* ‘grove’, where the stem has a structure with final *-w*, i.e. /jǣarw/, see therefore the discussion of those nouns in §3.42. The variation between /u/ and /o/ occurs because unstressed /u/ is lowered medially, see Hogg (1992b: §§6.55ff.). Additionally, and particularly after the EWS period,¹ forms with epenthetic /u/ or /o/² between /w/ and the preceding consonant occur in a minority of examples, e.g. *gearuwe*, *gearowe*, again paralleling the situation in the equivalent nominal forms.³ That the inserted /u/ or /o/ is the result of a phonological rule of epenthesis, see *ibid.*: §6.43, instead of analogical extension of the disyllabicity of the uninflected stem to inflected cases, is shown by epenthesized forms like *syrewung* ‘treachery’ (beside commoner *syrwung*) in which there is no possible analogical source for the added vowel.

¹ For EWS, CP has *gearuwe* 3× (alongside usual *gearwe*).

² Ælfrician texts show both *-u-* and *-o-*, but they appear to prefer the latter.

³ CP 433.30 has *gearra*, *ungearra* gen.pl., apparently with medial syncope, but quite possibly due to scribal error.

(f) *Nominative singular in -w*

4.40 Adjectives which have nom.sg. in *-w* are, like those immediately above, historical *wa*-stems, but in this case the final segment of the root was a vowel or a diphthong. In these adjectives, *-w* should have been lost finally, but it is regularly restored in the same way as with parallel nouns, see §3.44. Examples of this group include *gedēaw* ‘dewy’, *glēaw* ‘wise’, **hlēow* ‘warm’,¹ *hnēaw* ‘illiberal’, *hrēaw* ‘raw’, *rēow* ‘fierce’, *rōw* ‘calm’, *gesēaw* ‘juicy’, *slāw* ‘slow’, *þēow* ‘servile’. Like the parallel nouns, these adjectives regularly develop paradigms without allomorphic variation, with stem-final *-w-* before vocal endings reintroduced into the other cases, so that it appears in all inflected forms.²

¹ Attested only in the definite (weak) form Ex 495 *unhlēowan* ‘cold’ acc.sg.masc.

² Exceptions are rare, as in OccGl 49.694, AldV (2×) *glēa*, Jul 480 *rēone*.

(g) *Apocope*

4.41 Apocope of final *-u* after a heavy syllable should occur in the nom.sg.fem. and nom.acc.pl.neut. of this declension. In dialects other than LWS, where restructuring of the system has taken place, see §4.43, such apocope proceeds quite regularly, and hence we find in relevant parts of the paradigm heavy-stemmed forms of the type *blind* ‘blind’ contrasting with light-stemmed *sumu* ‘some’ in the nom.sg.fem. and nom.acc.pl.neut. It is perhaps significant that heavy-stemmed adjectives considerably outnumber light-stemmed adjectives, and this numerical dominance of zero-inflected forms may have contributed to the LWS restructuring of the paradigm.

4.42 In a number of adjectival types, the synchronic rule of apocope interacts with other synchronic rules in a noteworthy fashion:

- (a) Where the stem of the adjective ends in vowel or diphthong + [x], as with *hēah* ‘high’, then if the inflexion is *-u* the underlying form should be of the type /hæax+u/. The derivation then proceeds by way of lenition and loss of /x/ between voiced segments, giving /hæa+u/, and then apocope (which historically antecedes loss of hiatus in such forms) will occur after the heavy syllable, to give /hæa/, hence forms of the type *hēa*. The LWS restructured *hēah* for EWS *hēa* results from the developments discussed in §4.29&n2, probably with *-Ø* added to /hæax/ followed by final devoicing.
- (b) Where the stem of the adjective ends in consonant + [x], as in *þweorb* ‘crooked’, then loss of [x] may involve compensatory lengthening of the preceding diphthong. If so, then apocope should occur and the resultant forms should be of the type *þwēor*, the usual form in LWS. But the *þwēoru*-type also occurs, which would be expected if there were no compensatory lengthening and the stem were thus light after loss of [x], see the discussion of this issue in Hogg (1992b: §5.127).
- (c) Adjectives such as *wilde* ‘wild’, which have their nom.sg. in *-e*, do not show apocope of *-u*, hence *wildu*, etc.¹

¹ This is because the underlying form of their stem is /wilde/, and hence at the time of application of apocope their structure is /wilde+u/, and apocope will not take place, but rather there is late *e*-deletion, see §3.34 for the comparable situation amongst nouns.

4.43 When in LWS there is restructuring of this declension so that there is no differentiation of gender in the nom.sg. or throughout the plural, there is consequently no difference in inflexion between heavy- and light-stemmed adjectives, so that the nom.sg.fem. of *blind* is *blind* and the nom.acc.pl. of *blind* is *blinde*, whilst the light-stemmed adjectives such as

sum ‘some’ equally have *sum*, *sune*. In this restructuring, any rule of apocope has simply become irrelevant to the declension of adjectives. Compare how apocope has lost its phonological conditioning, apparently, in the declension of nouns, see §3.72.

(h) *Disyllabic and polysyllabic stems*

4.44 Disyllabic adjectives may be grouped into a variety of types, according to the nature of the second syllable:

- (a) where the second syllable consists historically of a syllabic sonorant, as in *biter* ‘bitter’, *efen* ‘even’, *fæger* ‘fair’,¹ *hlūtor* ‘pure’, *wacor* ‘wakeful’;
- (b) where the second syllable consists historically of a vowel + sonorant; this type includes words in which the second syllable is suffixal, as with *atol* ‘terrible’, *lȳtel* ‘little’, *micel* ‘great’, *yfel* ‘evil’, all with *-el*, *-ol*; *gylden* ‘golden’, *hæþen* ‘heathen’, with *-en* < **-in-*;² and *āgen* ‘own’, *fægen* ‘glad’, *open* ‘open’, with the suffix *-en* < **-an-* of the past participle;
- (c) where the second syllable consists historically of a vowel + approximant; this type consists exclusively of words with suffixal *-ig* of whatever origin (Gmc. **-īz-* or **-az-*), hence *dysig* ‘foolish’, *hālīg* ‘holy’, *hefiġ* ‘heavy’, *moniġ* ‘many’;
- (d) where the second syllable consists historically of a vowel + obstruent, as in *arod* ‘quick’, *forod* ‘broken’, *fracop* ‘wicked’, *nacod* ‘naked’;
- (e) where the second syllable is heavy, as with, for example, the suffix *-iht* in *stāniht* ‘stony’ or the present participle in *-ende*.

Adjectives formed with nom.sg. in *-e* are discussed in §§4.31–5. Those formed with rather distinct derivational suffixes like *-lic* and *-leas* present special problems and are discussed in §4.52. In addition, there are three groups of disyllabics which are best characterized morphologically, namely the strong past participle in *-en*, the weak I past participle in *-ed* and the weak II past participle in *-od*. Since the morphological behaviour of these past participles is sometimes different from that of other disyllabics, they are discussed separately below in §§4.53–6.

¹ An Angl form *fēger* occurs with a long root vowel: see Sievers (1885: 498–9), Fulk (1992: §355.3).

² But all such forms frequently fail to show *i*-umlaut, e.g. *lēaden* ‘of lead’, *stānen* ‘stony’, see Hogg (1992b: §5.85(10a)).

4.45 The most straightforward of the types listed in §4.44 is type (e), in which the second syllable is heavy, for such adjectives simply add the regular

inflexions to their stem without significant allomorphic variation except for the phonologically regular apocope of *-u* where appropriate. The same also appears to be true for type (d) adjectives such as *nacod*, where again the inflexions are added directly to the stem and where apocope applies as elsewhere.¹ It should be noted that syncope of the vowel of the second syllable never occurs in either of these two types.

¹ See §§4.41–3 for discussion of apocope.

4.46 The typical LWS paradigm of *hālig* ‘holy, an adjective of type (c), when declined indefinite, is as follows:

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	<i>hālig</i>	<i>hālig</i>	<i>hālig</i>	<i>hālige</i>
<i>Acc.</i>	<i>hāligne</i>	<i>hālig</i>	<i>hālig</i>	<i>hālige</i>
<i>Gen.</i>	<i>hāliges</i>	<i>hāliges</i>	<i>hāligre</i>	<i>hāligra</i>
<i>Dat.</i>	<i>hālgum</i>	<i>hālgum</i>	<i>hālgum</i>	<i>hālgum</i>

Such forms are almost invariable in the best Ælfrician texts,¹ see §4.77n2, although some examples of syncopated gen.dat.sg., nom.acc.pl., i.e. *hālīges*, *hālīge*, can be found in non-Ælfrician LWS texts. Note that syncope applies only when an inflexion beginning with a back vowel is added. Pope (1967–8: I, 185) accordingly argues that the <i> in forms like *hālīges* is merely a diacritic indicating the palatal nature of the following consonant, but cf. §4.47n1. Other adjectives of type (c) are declined similarly, except that syncope is rare in any form, hence dat. pl. *ēadigum* ‘fortunate’, *ælmihdigum* ‘almighty’, etc. In eME, Orm similarly treats *haliz*, inflected *hallzhe*, differently from other adjectives in *-iz*, see Fulk (1992: §190n12). For differences between this paradigm and that in EWS and Angl dialects, see §4.48. Examples of adjectives of this type include *æfstig* ‘envious’, *ānig* ‘any’, *blōdig* ‘bloody’, *cystig* ‘generous’, *ēadig* ‘fortunate’, *grādig* ‘greedy’, *gyltig* ‘guilty’, *hungrig* ‘hungry’, *mēdig* ‘weary’, *mihtig* ‘powerful’, *mōdig* ‘brave’, *gemyndig* ‘mindful’, *sārig* ‘sorry’, *gesālig* ‘blessed’, *scyldig* ‘guilty’, *spēdig* ‘prosperous’, *swātig* ‘sweaty’, *syndrig* ‘separate’, *synnig* ‘sinful’, *geþyldig* ‘patient’, *wērig* ‘weary’, *wintrig* ‘wintry’, *wyrðig* ‘worthy’, all with a heavy first syllable, and *dysig* ‘foolish’, *hefig* ‘heavy’, *lytig* ‘cunning’, *welig* ‘wealthy’, *wlitig* ‘beautiful’, all with a light first syllable.

¹ A similar pattern of distribution occurs with the definite (weak) declension, see further §4.60(e). Exceptions such as ÆCHom I 358.32 *hālīge*, nom.sg.fem. definite, are rare.

4.47 The paradigm in §4.46 differs from the historically expected paradigm in the forms *hālīges*, *hālīge*, where the normal operation of syncope

would have been expected to produce *hālġes*, *hālġe*, since, historically, syncope occurred in open syllables and affected all non-high vowels and also high vowels when preceded by a heavy syllable, see for details Hogg (1992b: §§6.14–19). In most poetry, forms like *hālġes* must sometimes be scanned as disyllables, no matter how they are written, presumably because of the apparent derivation of most extant poems from Angl originals. In poems known to be of West Saxon origin, and in some seemingly late Angl poetry, the unsyncopated vowel in such forms must be scanned as a metrical syllable, e.g. Met 20.163 *ǣniġe* ‘any’ acc.sg.fem. (trisyllabic), Jud 245 *-wēriġum* ‘weary’ dat.pl. (trisyllabic), though words that must be scanned as if the vowel were syncopated are also in evidence, e.g. Met 26.115, 31.22 *ǣniġes* ‘any’ gen.sg.masc. (disyllabic).¹ Given the conservative nature of poetic language and the restriction of the syllabic scansion to relatively late poetry, it seems likely that forms like *hālġes* did undergo syncope but ultimately restored the syncopated vowel by analogy to uninflected forms, see *ibid.*: §§6.16, 7.76n2. On the other hand, it is not impossible that forms in WS poetry without restoration of the syncopated vowel are due to imitation of Angl or archaic models, an undeniable occurrence in regard to some other poetic features.² If that is so, it would be possible to argue that in the type *hālġe*, syncope failed to take place in WS because the medial /i/ was protected by the immediately following palatal /j/. In that event the historical rule of syncope would need to be revised to take account of this, and the synchronic rule of syncope which applies in these cases would be a direct reflex of the historical change.³ There are reasons, however, to prefer the explanation on the basis of analogical restoration of the syncopated vowel.⁴ Where an adjective with a heavy first syllable ends with a consonant cluster, then it is often the case that syncope is prevented even in the dat.sg.pl. if an unusual consonant cluster would arise, hence usual *miltiġum*, etc., is almost exceptionless. If the first syllable is light, then it might be expected that syncope would never occur, and indeed exceptions are rare.⁵

¹ See Fulk (1992: §§216–20), with references. In view of such metrical evidence, it is necessary to discount the possibility suggested by Pope (1967–8: I, 184–5) that *i* in forms like *hālġes* is merely a diacritic indicating the palatal nature of *ġ* rather than an actual syllable nucleus. Cf. Men 68 *hālġe* acc.pl.masc. (trisyllabic).

² Thus, for example, unsyncopated forms of strong verbs in the 1st and 2nd persons sg. of the pres.ind. are not uncommon in the poetry, unlike the prose, of King Alfred.

³ This is the conclusion at which RMH ultimately arrived, rejecting the account given in Hogg (1992b: §6.16, also §7.76n2), and also Pope (1967–8: I, 184–5).

⁴ Analogy is required to account for unsyncopated vowels in a range of other suffixes and stems in LWS texts, and these restored vowels, too, may be required by the metre of some late poems, e.g. Met 13.30 *āġenes* ‘own’ (trisyllabic), Mald 109 *ġeġrundene* ‘ground’ (tetrasyllabic), MSol 112 *wuldores* ‘glory’ (trisyllabic). Known processes in the language thus account for the phenomenon in connexion with the adj. suffix *-iġ-*, and, by Occam’s razor, further complication of the grammar is undesirable.

⁵ We have not noted any such exceptions in Ælfric.

4.48 The LWS paradigm given in §4.46 is generally applicable to EWS also, although a minority of forms show syncope, whereas this is rare in LWS, hence CP 467.32 *hālge*, 451.25 *ænges*, see for full details Cosijn (1886: §42).¹ On the other hand, Angl texts usually show syncope in open syllables throughout the paradigm, although a minority of unscopated forms occur. A further characteristic of these adjectives is the shape of forms with which inflexional *-u* occurs. It might be expected that *-u* would be apocopated after two light syllables but retained after a heavy and a light syllable. In fact, however, apocope usually does not apply even after two light syllables, hence examples such as CP *manegu* (2×), PsGl(A) 109.6 *monigu*,² Li *monigo* (frequent). This is in striking contrast to the situation with nouns, in which apocope is usually extended, see, for example, §§3.63–5.

¹ This is not the impression which a cursory reading of the standard handbooks might suggest, but a closer reading of, say, Campbell (1977: §643.5), Brunner (1965: §296&A2) will show that this situation is at least in part recognized.

² Alongside 21.13 *moniġ* with apocope. *Monigu* appears to be an analogical creation by pairing with its antonym *lytelu* and under the influence of heavy-stemmed adjectives in *-iġ*, which regularly add *-u* in PsGl(A): see Fulk (2010c: 135–6).

4.49 In LWS, adjectives of type (b) mostly show no syncope regardless of the following inflexion, and hence the normal inflexions of this declension are simply added directly to the stem. This appears to be true both of adjectives with an initial heavy syllable such as *gylden* ‘golden’, *hæþen* ‘heathen’ and of those with an initial light syllable, such as *atol* ‘terrible’, *fæġen* ‘glad’, *open* ‘open’, *swutol*, *swutel* ‘clear’, *yfel* ‘evil’, regardless of whether the second syllable was suffixal or from some other source, see §4.44. There are, however, some common adjectives which depart from the above pattern. Thus, amongst those with an initial heavy syllable, *lytel* ‘little’ appears always with syncope in Ælfric, and with an initial light syllable *micel* ‘great’ varies between syncopated and unscopated forms.¹

¹ When *micel* undergoes syncope, then *ċ* is often geminated by the immediately following liquid, after deaffrication giving *miccle*, etc. (For details of such gemination, see Hogg (1992b: §7.78).) Whether *ċ* was actually deaffricated when it came into contact with the following consonant cannot be determined with certainty. One piece of evidence for such deaffrication is the fact that in some texts, esp. PsGl(E) and Li, *micel* is frequently spelt with <ch> when *-el(-)* follows, but never when *-l-* follows.

4.50 The adjectives of type (a) which correspond to the type (b) adjectives except in that their second syllable historically consists only of a syllabic sonorant appear in LWS mostly to decline similarly to the type (b) adjectives. This is especially true of those with an initial light syllable in the stem, such as *biter* ‘bitter’, *fæġer* ‘fair’, where unepenthesized forms with vocalic

inflexions, for example *fægre*, are in a minority. Where the initial syllable is heavy, on the other hand, as in *hlūttor* ‘pure’,¹ epenthesis in forms with vocalic inflexions is rarely found.² The above distribution suggests that the adjectives with a light initial syllable have been restructured with an epenthetic vowel in the underlying form of the stem, thus assimilating to the type (b) adjectives of §4.49. On the other hand, the adjectives with a heavy initial syllable may best be considered as having underlying forms with a non-syllabic sonorant, excepting, perhaps, /r/, see §3.65.³ The underlying forms of such disyllabic adjectives would then parallel in most ways those of the disyllabic nouns of the *as*- and *a*-declensions, see §§3.56–72, 3.100–4.

¹ Note that *tt* is due to gemination by the following liquid, cf. §4.49n1. In Ælfric, spellings of the type *hlūtor* are infrequent.

² Naturally, however, an epenthetic vowel is found in forms in which the inflexion begins with a consonant. It should also be noted that in instances in which the sonorant is identical to the initial consonant of the inflexion, then degemination in unstressed syllables can occur. The frequency of such degemination is higher in later texts than in earlier texts, see Hogg (1992b: §7.80).

³ This may account for the fact that Ælfrician texts regularly spell all forms of *biter* with a single medial consonant, in contrast with *hlūttor* discussed in n1 above.

4.51 In EWS and non-Ælfrician LWS the situation regarding both type (a) and type (b) adjectives is more variable than in Ælfric, with considerable mixture of syncopated and unsyncopated stems before vocalic endings.¹ In Angl, on the other hand, what we generally find is that, with relatively few exceptions, there is syncope in both type (a) and type (b) adjectives, regardless of whether the initial syllable is heavy or light, when a vocalic inflexion follows, e.g. PsGl(A), Li *micle* ‘great’, *yfle* ‘bad’, *lýtle* ‘little’; cf. the similar treatment of nouns, §3.68. The most regular exception is that very often syncope fails when the inflexion is *-u*, as with the comparable nouns, see §3.64 as regards the situation in PsGl(A). Thus, it seems likely that adjectives of types (a) and (b) were restructured in Angl in much the same way that comparable nouns were restructured, see §§3.71, 3.104: all such adjective stems became underlyingly monosyllabic, except in PsGl(A), where (presumably, given the evidence of nouns of similar structure) the original distinction was maintained between types (a) and (b) when the initial syllable was heavy. There do not happen to be in PsGl(A) any stems of type (a) with a heavy syllable before the final sonorant in the proper case to show apocope of *-u* as against examples of type (b) without apocope, e.g. *lýteltu* nom.pl.neut.

¹ For specifics of the situation in EWS, see Cosijn (1886: §§40–2).

4.52 Adjectives formed with rather distinct derivational suffixes like *-leas* and *-lic* are not entirely uniform in their treatment. Those formed with

heavy suffixes ending in two consonants, such as *-cund*, *-fæst*, *-fald*, *-full*, are inflected the same way as heavy monosyllabic stems, so that, for example, *-u* is missing in the fem.nom.sg. and neut.nom.acc.pl. Heavy suffixes like *-lēas-*, formed with an etymologically long vowel or diphthong and a single final consonant, however, should be expected to have undergone vowel shortening when final, see Hogg (1992b: §2.89). In medial syllables, however, *-lēas-* should have retained its long diphthong, and this explains why adjectives in *-leas* never bear the inflexion *-u* in the fem.nom.sg. and neut. nom.acc.pl., where it should have been apocopated after a heavy syllable. The prescription of *ibid.*: §2.89 as regards shortening in unstressed syllables, however, must be treated with caution, since there is ample evidence from ME that vowels thus shortened were often subsequently restored on an analogical basis.¹ This observation has particular relevance to the adjective suffix *-lic*.² The vowel was originally long,³ but it should have been shortened in uninflected forms, e.g. *ścandlic* ‘shameful’. However, a short vowel seems to have been used throughout the paradigm at an early date: unlike *-lēas-*, the suffix *-lic-* is well attested with the inflexion *-u* (though of course never in *Ælfric*, since adjectival *-u* never appears in *Ælfrician* texts, see §4.29); and spellings like CP 14.83.22 *mislecum* dat.pl. and GenA 884 *frēolucu* nom.sg.fem. presuppose a short vowel. When the suffix follows an unstressed syllable, on the other hand, it should be stressed and thus impervious to shortening, e.g. LS 7.276 *earfoðlic* ‘difficult’.⁴ In IOE, however, it appears that the short vowel was replaced by the long one throughout the paradigm. This explains the absence of variants like *-lec-*, *-luc-* in *Ælfric*, as well Orm’s *e(o)rplic*, *flæshlic*, *gastlic*, etc.⁵ That the suffix *-sum*, like *-lic*, never bears the inflexion *-u* in *Ælfric* is no counterevidence, since the adjective suffix *-u* is nowhere in use in *Ælfric*, see §4.29. Thus, to *ÆHex* 428, *ÆCreat* 181 *wynsum wunung*, compare LS 25 (MichaelMor) 217 *wynsumu*.

¹ Thus, for example, Orm has usually *-læs* (*are-*, *ellen*, *e33e-*, etc.) beside only *endeless*; likewise *-fald* (*an-*, *fif-*, *pre-*, *twi-*), with lengthening before the homorganic consonant cluster, beside *-warrd* (*affierr-*, *dunn-*, etc.) and *godcunnde* without it. There is supporting evidence in nominal suffixes, e.g. *-dom* (*heþenn-*, *haliz-*, *wiss-*, etc.). See Fulk (1992: §213; 2002: 82–3n3).

² On the derivation, see Dishington (1981).

³ It is always long in the adverb suffix *-lice*, though it is short in comparative forms of adverbs, see §4.77n2. The IOE extension, mentioned below, of the long vowel to all adjective forms may thus be attributed to preservation of the long vowel both in adjective forms like *earfoðlic* and in adverbs.

⁴ It is impossible to determine for certain whether the vowel should be long in a form like *beofonlic* ‘heavenly’, with a resolvable first constituent metrically equivalent to a single heavy, stressed syllable (just the way two light syllables function in the same manner as one heavy with respect to the syncope of high vowels, e.g. with loss of *-u* in the neuter plurals *word* ‘words’ and *werod* ‘troops’). But forms like *BedeHead* 4.18.22 *beofonlicu* are not uncommon, and they suggest that the vowel of the suffix was not long in such forms, as then we might expect high vowel apocope.

⁵ For discussion, see Fulk (1992: §§221–5, of which Calle Martín and Miranda García, 2000, seem to have been unaware), where it is also pointed out that whilst there is evidence for a short vowel in poems that appear to have been composed relatively early, there is none in later poems.

(i) *Past participles*

4.53 The past or passive participles which equate to the disyllabic adjectives discussed in §§4.44–52 are of three types: the strong participle in *-en*, the weak I participle in *-ed* and the weak II participle in *-od*.¹ Each of these participles has a slightly different pattern of morphology from the others, and therefore they are discussed separately in §§4.54–6 below.

¹ Not relevant here are the weak past participles without medial vowel of the type *worhte* ‘worked’, *sealde* ‘given’, see §6.100.

4.54 Strong participles in *-en* regularly appear in LWS without syncope, e.g. *aworpene* ‘cast out’, *behātene* ‘promised’, *beswicene* ‘deceived’, *gebundene* ‘bound’, *gehealdene* ‘kept’, and many others which in Ælfric are not found in syncopated form.¹ In EWS texts the situation is more variable, for there syncope is found in a significant minority of examples, e.g. in CP *gebundne* (9×) against *gebundene* (7×), 245.26 *aworpne*, 403.14 *gehealdne*, but only *beswicene* with a light root syllable. Outside WS, syncope is frequent in PsGl(A) but much less so in Ru1, whilst it is more common in Ru2 and less common in Li. The situation is therefore broadly parallel to that found in the disyllabic adjectives of similar structure, see §4.49, although, overall, syncope is less widely found with the participles. There may have been greater pressure to eliminate allomorphic variation here, by failing to allow the rule of syncope to apply, because of the dominance of the uninflected and unsyncopated form of the participle, cf. §4.55.

¹ The same generally applies in other LWS texts, including Wulfstan, though syncopated forms occur in LWS texts that show Angl characteristics, such as the Blickling and Vercelli homilies.

4.55 Weak I participles in *-ed* normally show syncope only after heavy syllables, e.g. *gedēmdē* ‘judged’ vs. *gefremede* ‘furthered’. In the historical development of these forms the medial vowel was /i/ at the time of syncope, see further §6.82, and hence syncope is the expected development. Presumably, therefore, the synchronic analysis of these participles must start from the premise that the underlying medial vowel remains as /i/. In some WS texts, notably in Ælfric and frequently but less regularly in the earlier CP, Or, syncope is extended to uninflected forms of the participle when the stem ends in a dental stop, e.g. *afēd(d)* ‘brought up’, *gelæd(d)* ‘led’ rather than *afēded*, *gelæded*, see §6.93. Other WS texts, however, including GD, seem

to prefer the unsyncopeated forms, and this is true of nWS texts also. Although this phenomenon is usually regarded as an analogical extension of syncope, e.g. in Campbell (1977: §§351n2, 644(d)), Brunner (1965: §402.2), which synchronically might be regarded as a restructuring of the underlying form without any medial vowel, both these explanations may be misleading. It may be that *afēd*, etc., are not examples of syncope in the normal sense but rather of deletion of the medial vowel and (usually) simplification of the resultant consonant cluster in order to avoid repetition of the dental consonant. It might therefore be regarded as a product of the impulse to dissimilation evident elsewhere in the grammar, see Hogg (1992b: §6.64) and §6.71 below.

4.56 Weak II participles in *-od* do not show syncope and hence are of the type *gelufod* ‘loved’. If it is assumed that the underlying medial vowel is /o/, then this is not easily explicable, since /o/ would be subject to non-high vowel syncope. Even if the underlying vowel were assumed to be /u/, high vowel syncope would occur after heavy syllables, but this is not found, e.g. *gewundode* ‘wounded’. This has led some, such as McCully and Hogg (1990: 332), to suggest that synchronically the medial vowel of these forms must have been /o:/, which would directly reflect their historical origin. Such a suggestion, although it may receive support from stress patterns, remains unproven.¹

¹ The synchronic situation is unclear. For a discussion of the diachronic issues, see Fulk (1992: §228).

III Definite (weak) adjectives

1 *Historical origins and inflexions*

4.57 The definite (weak) adjective declension was formed in PGmc by the addition of the inflexions of the *ōn*-stem nouns, see §§2.84–5, to the stem of the indefinite adjective, and thus the development in OE is to a set of inflexions which correspond closely to the inflexions of the synchronic *an*-declension, see §§3.106–9. The principal exception to this formulation is the shape of the gen.pl., which is usually *-ra*, i.e. identical to the gen.pl. inflexion of the indefinite declension, see §§4.13, 4.15. Thus, we most often find a paradigm of the following type for this declension:¹

	Masculine	Neuter	Feminine	Plural
<i>Nom.</i>	blinda <i>blind</i>	blinde	blinde	blindan
<i>Acc.</i>	blindan	blinde	blindan	blindan
<i>Gen.</i>	blindan	blindan	blindan	blindra
<i>Dat.</i>	blindan	blindan	blindan	blindum

¹ In contrast to the situation with indefinite adjectives, it is not possible to trace a separate instrumental case for the definite adjectives.

4.58 There are a small number of dialectal variations in inflexion, of which the following are the most important:

- (1) In EWS the gen.pl. is always taken from the *an*-declension and is mainly of the form *-ena*, although many examples of *-ana* co-occur; for a full list, see Cosijn (1886: §51). In LWS and Angl, however, this ending is rare, and it is notable that it is entirely absent from PsGl(A), which suggests that EWS was conservative in respect of the form of this inflexion. Very rarely there occur LWS forms in *-an*.¹
- (2) It is in this declension that the dat.pl. of adjectives is first frequently found as *-an*. Already such forms are frequent in EWS, see Hogg (1992b: §7.102). However, it is doubtful whether LWS texts use dat.pl. *-an* more frequently in this declension than elsewhere, although this may simply testify to quasi-historical orthographic convention.
- (3) In Nbr, loss of final *-n*, see *ibid.*: §§7.98–100, together with the falling together of unstressed vowels, can cause some confusion between indefinite and definite inflexions, so that, for example, there appears to be no distinction in INbr between indefinite and definite forms of the nom.acc.pl. A further noteworthy feature of Nbr inflexion in this declension is the use of gen.sg. *-es*, as in JnGl(Li) 11.37 *blindes*; cf. §§3.75, 3.78, 3.108.

¹ Hoard (1994) identifies several secure examples, including *ÆCHom* I 40 610.11 *foresædan* and *ÆLS* (Julian and Basilissa) 432 *hālgan*.

4.59 It is important to remember that these inflexions are added to the stem of the indefinite adjective, regardless of the historical formation of the original adjective. Thus, inflexions are added to a structure which includes the OE reflex of PIE stem-forming suffixes. Indefinite and definite pairs of this type include, for example, *midd* ~ *midda* ‘mid’, *wilde* ~ *wilda* ‘wild’, *blīpe* ~ *blīpa* ‘joyful’, *heard* ~ *hearda* ‘hard’, *gearu* ~ *gearwa* ‘ready’; see §§4.4–8 for discussion of the historical stem types which existed in PGmc and their development into OE.

2 Allomorphic variation

4.60 The types of allomorphic variation found in the indefinite declension and discussed in §§4.20–55 apply equally to the definite declension, and therefore they require no special discussion here. Only a few potentially confusing matters need be mentioned:

- (a) Adjectives of the type *hwæt* ‘active’, which, when indefinite, have *a* in open syllables, for discussion of the phenomenon see §§4.22–4, show the same distribution when definite, e.g. *blace* ‘black’ nom.sg.fem.
- (b) In those texts, particularly in LWS, in which *hēah* is restructured as /hæaɣ/, see §§4.25ff., this declension has parallel forms of the type *hēaga*.
- (c) Adjectives with stem-final *-e*, e.g. *wilde* ‘wild’, may be assumed also to have stem-final *-e* in this declension, although it will always be deleted, since every inflexion starts with a vowel.
- (d) Adjectives with stem-final *-w*, when indefinite, show *-u* in word-final position or *-o* medially before consonants, as in *gearu* ‘ready’, see §§4.38–9, but no such allomorphic variation should occur in the definite declension except in the genitive plural (in which, however, there are no relevant definite forms attested), since otherwise /w/ is always followed by a vowel and hence remains, thus *gearwa* and forms ‘ready’.¹
- (e) In the best Ælfrician texts, see §4.77n2, definite forms of *hālig* ‘holy’ have syncope before inflexions beginning with back vowels but not front vowels, hence, generally, *hālgan*, but nom.sg.fem.&neut. *hālige*. The rule does not apply to other adjectives in *-ig*, e.g. *sæligan* ‘blessed’, *wurðigan* ‘worthy’. The pattern thus resembles that found in the definite adjectives, §4.46.

¹ As in other declensions, /w/ remains even before /u/, so that we find dat.pl. *gearwum*, etc.

IV Comparison of adjectives

1 *Historical origins*

4.61 The PGmc comparative and superlative were formed by a comparative morpheme to which was added an additional suffix in the case of the comparative itself, the superlative being formed by the addition of the superlative suffix to the bare comparative. The comparative morpheme which Gmc inherited from PIE was **-iz-* < **-is-* by Verner’s Law (see Hogg 1992b: §§4.4–5), but in Gmc an alternative morpheme **-ōz-* arose.¹ In Gothic, the two types are equally common, but in all other Gmc languages the latter form comes to predominate. The crucial difference between the two formations as far as OE is concerned is that the former causes *i*-umlaut whilst the latter does not, see §§4.68–71 for discussion and examples. The suffix which is attached to one or other of these morphemes in the comparative degree is **-on-*, **-en-* from the *n*-stems, which gives in Pre-OE the

combined suffix **-ōzan*, **-izan*. The origin of the suffix in the *n*-stems explains why the comparative adjective is always declined as a definite, see §4.2, even though comparatives may be used in syntactically indefinite constructions, e.g. And 1088 *beteran ræd* ‘a better plan’. The superlative morpheme inherited in Gmc was PIE **-to-*, and thus the combined suffix in Pre-OE would have been **-ōsta-*, **-ista-* (where **t* prevented the voicing of PIE **s*). Except in the nom.sg. (and consequently acc.sg.neut.), the superlative is most frequently declined as definite. It is virtually certain that all adjectives used the same comparative morpheme in the construction of their comparative and superlative forms: that is, adjectives with comparatives in **-iz-* formed the superlative with **-isto-*, those with comparatives in **-ōz-* formed the superlative with **-ōsto-*.^{2,3}

¹ The precise origin of this morpheme is not relevant here, although it appears to be related to adverbial formations in **-ō*. For discussion see, for example, Hirt (1932: §83), Prokosch (1939: §91) and the further references in each.

² This, of course, would accord with common sense, but it is also noteworthy that even in Gothic, the language in which a mixture of morphemes would be most likely to occur, there are no such mixed examples, see Wright (1954: §244).

³ There is some variation in a few adjectives, whereby the older form of the superlative is lost in favour of the type with **-ōst-*, see §4.69(2).

4.62 The principal comparative suffix in OE, as described in §4.61, originates in PGmc **-ōzan*, and the predicted development to OE would give **-ara*, but this never occurs, and instead the regular form is the apparently syn-copated *-ra* added directly to the stem of the adjective, hence *blindra* from *blind* ‘blind’. Such syncope of an historically long vowel, i.e. **blindōrōo* > *blindra*, is entirely unexpected, and so the consistency of syncope here cannot easily be justified on purely phonological grounds.¹ Campbell (1977: §660) suggests that the construction may be on the analogy of adjectives with their comparative formed according to the PIE method, namely with suffixal **-izan*, in which syncope of the short medial vowel would occur regularly to give *-ra*. This solution, which appears to be the most profitable, is nevertheless not without problems and cannot be regarded as definitive.² Yet further analogical pressure may have been exerted from within the paradigm itself: before the *n*-stem endings containing **-ū-* (masc.&fem.acc.sg.&pl., dat.pl. of all genders, see §2.84),³ the comparative suffix **-ōz-* should have changed to **-ūz-*, see Hogg (1992b: §3.34), in which the vowel would be subject to shortening and syncope in Pre-OE.⁴ Thus, it may be assumed that in some cases attachment of the comparative suffix in *-r-* without a preceding vowel and without *i*-umlaut is etymologically correct, and such forms would have exerted pressure to regularize the paradigm by replacing endings in **-ar-* with ones in *-r-*. On this analogical development, see further §4.63n1.

¹ Nor, as Campbell (1977: §660) clearly points out, can it be justified on comparative grounds, since the other Gmc languages all retain the medial vowel in one form or another, though in Old Frisian *-er-* and *-r-* co-occur, see Bremmer (2009: 66).

² In particular, Campbell has to argue that in Pre-OE, **-ir-* was commoner than (or at least as common as) **-ōr-*, on the reasonable assumption that the analogy is based on the unmarked suffix. But the prevalence of forms derived from **-ōr-* in all the Gmc dialects except Gothic suggests that this suffix had become dominant during the time of the NWGmc unity, on which see Hogg (1992b: §1.3). It is also not clear whether the analogical process is extension of syncope, as suggested by Campbell, or shortening of *-ō-* to parallel *-i-*, which would be equally possible. A further difficulty arises with respect to *i*-umlaut, but this is discussed in §4.69. Finally it should be noted that if this is an analogical process, it is confined to OE, and therefore it is surprising that there are no examples surviving which show failure of the analogical process.

³ It must be noted, however, that the account offered here is based upon the assumption that after the PGmc inflexions masc.acc.sg. **-um*, etc., caused raising of **ō* to **ū* in the preceding *n*-suffix, the **ū* thereby created in turn caused raising of **ō* to **ū* in the preceding *z*-suffix, e.g. **harð-ōz-on-um* > **harð-ōz-un-um* > **harð-ūz-un-um*, and although the first step in this line of development is well attested, the latter step appears to be impossible to prove or to disprove by reference to parallels in either West or North Gmc.

⁴ See Hogg (1992b: §§6.28, 6.18). There is some controversy about whether medial *ī* and *ū* were shortened early enough to undergo syncope in all the same environments as originally short *i* and *u*, see Fulk (1992: §§187–93), with references. But the assumption of syncope in the present instance should be uncontroversial: it may be compared to the syncope of original **ī* in forms like PsGl(A) *gyldnum* ‘golden’ dat.pl., from **zulðīnumiz*.

4.63 The principal superlative suffix in OE, as described in §4.61, originates in PGmc **-ōsta*, and this would give in OE either *-ust* or *-ast*; *-ust* would then develop to *-ost*, see Hogg (1992b: §3.34) for explanation and details.¹ The definite form of the nom.sg. has, of course, a final inflexional *-a*, giving the shape *-osta*, and in these conditions the unstressed medial vowel may then further reduce to give *-esta*, cf. *ibid.*: §6.64. Such forms may then influence the endless indefinite forms. For details of the distribution of the variant forms of the suffix, see further §§4.66ff.

¹ Although the developments appear straightforward from an OE point of view, it should be clear from Hogg (1992b: §3.34) that PGmc **-ōsta* should develop as *-ast* except before **-u-*, where it becomes *-ust*. In indefinite adjectives, the change to *-ust* would happen in the masc.&neut.dat.sg., in definite adjectives in the same cases discussed in §4.62, if the account given in §4.62n3 is correct. The commonest form of the suffix in OE, *-ust/-ost*, thus appears to have been generalized from these cases, and this renders it more natural that the OE comparative suffix in *-r-*, as opposed to **-ar-*, should have been generalized from the same definite cases. But cf. §4.67.

4.64 There are two minor forms of comparison, which are as follows:

- (1) When compared adjectives are derived from adverbs, the superl. is most often formed by the suffix *-mest*, as with *innemest* ‘innermost’

superl. of adverb *inne* ‘inside’, although there is a smaller, but older, de-adverbial group exemplified by *ǣrra*, *ǣrest* ‘earlier, earliest’; for examples and discussion of both types, see §§4.72–4.

- (2) Four adjectives of high frequency, being two semantically related pairs, form their comparative and superlative by suppletion. These adjectives are:

<i>gōd</i> <i>good</i>	<i>bet(e)ra</i>	<i>bet(e)st</i> , <i>best</i>
	<i>sēlra</i> , <i>sella</i>	<i>sēlest</i>
<i>yfel</i> <i>evil</i>	<i>wyrsa</i>	<i>wyrst</i> , <i>wyrrest</i>
<i>lȳtel</i> <i>little</i>	<i>læssa</i>	<i>læst</i> , <i>læsest</i> ¹
<i>micel</i> <i>great</i>	<i>māra</i>	<i>mæst</i>

Of these suppletive forms *bet(e)ra*, *bet(e)st* and *sēlra*, *sēlest* can both be found in a wide variety of texts, although the former pair predominate in prose, the latter pair in poetry.² On the phonological variations in these forms, see §4.71.

¹ See §4.71 on LawAbt 56 *lærestan*.

² Note the alternative glossing of Lat *melior* at MtGl(Li) 12.12 *betra t sella*.

2 Variation in Old English

4.65 The nom.sg.masc. of the usual OE comparative, formed according to the principles outlined in §4.62, is of the type *blindra* from positive *blind*, and, by coincidence only, this is identical in shape to the gen.pl. of the positive. The nom.sg.masc. of the usual OE superlative is formed by the addition of the superl. suffix directly to the stem, hence *blind* ~ *blindost*. The principal allomorphic variations found in comparison are identical to those found in the positive forms of the same adjectives, and hence we find nominatives of the following subtypes, arranged according to their order of discussion in §§4.21–52, with the addition, for comparison, of the regular forms of *blind*:^{1,2}

Positive	Comparative	Superlative
<i>blind</i> <i>blind</i>	<i>blindra</i>	<i>blindost/blindesta</i>
<i>hwæt</i> <i>active</i>	<i>hwætra</i>	<i>hwatost/hwatesta</i>
<i>wilde</i> <i>wild</i>	<i>wildra</i>	<i>wildost/wildesta</i>
<i>blīþe</i> <i>joyful</i>	<i>blīþra</i>	<i>blīþost/blīþesta</i> ³
<i>nyt(t)</i> <i>useful</i>	<i>nytttra</i>	<i>nyttost/nyttesta</i> ³
<i>gearu</i> <i>ready</i>	<i>gearora</i> ⁴	<i>gearwost/gearwesta</i>
<i>glēaw</i> <i>wise</i>	<i>glēawra</i>	<i>glēawost/glēawesta</i>
<i>biter</i> <i>bitter</i>	<i>bittera</i> ⁵	<i>biterost/biteresta</i>
<i>hāliġ</i> <i>holy</i>	<i>hāliġra</i>	<i>hālgost/hālgesta</i>

¹ For the superlative we give both the indefinite and definite forms of the nom.sg. Given the relative infrequency of superlative forms, many of the examples are hypothetical.

² For comparative and superlative forms of *bēah* ‘high’, see §§4.68–9.

³ *Nyt(t)* declines like *midd* ‘middle’, which generally lacks compared forms.

⁴ WHom 15.57 has *gearwre*, and LawICn 19.2 *gearuwre*, which may be re-formations from adverbial *gearwe*. On CP *gearran*, *gearra* see §4.39n3.

⁵ Found only in Alex 233 *bitterre* nom.sg.neut.

4.66 The commonest shape of the superlative suffix in most dialects is *-est(-)* even when uninflected, and in PsGl(A) no other forms are found.¹ As indicated above in §4.63, *-est* is due to reduction of the unstressed vowel in medial position, e.g. *lēofosta* ‘dearest’ > *lēofesta*.² The unreduced superlative *-ost* has two principal variant forms, namely *-ust*, *-ast*. The first of these is explicable as the earlier form of the unstressed high back vowel derived from PGmc **-ūst-* by shortening. The second form *-ast* is to be derived from PGmc **-ōst-*, which would give *-ast* by lowering and shortening; for the development of both forms see firstly Hogg (1992b: §3.34). Alongside the more frequent *-ost*, both *-ust* and *-ast* are sometimes found in EWS, but neither is frequent in LWS. Nbr shows both *-ost* and *-ust*, whilst Kt has *-ast* in early charters, but the later OccGl 49 has forms only in *-est*.

¹ Ru1 offers no direct evidence.

² There is a tendency in WS, though it is by no means a firm rule, to write *-est-* when a back vowel follows, see Hogg (1992b: §6.64). Similar vowel dissimilation is in evidence in PsGl(A), but not in connexion with this suffix, which is always *-est-* there.

4.67 It should be noted that the morpheme *-ust/-ost* is the result of a somewhat unexpected development. As explained in Hogg (1992b: §3.34), the initial vowel of the morpheme is from PGmc **/o:/**, a vowel which was subject to raising before either **/u/** or **/m/**, as in **zebōmiz* > **zebūmiz* > *gyfum* ‘gifts’ dat.pl, but elsewhere it remained. This would permit, after the lowering of */u/** and */o/** in most unstressed positions, see *ibid.*: §§6.28, 6.55, an alternation between *o* and *a*. Thus, the superlative morpheme *-ust/-ost* must be the consequence of such Gmc raising, whilst the alternative *-ast* fails to undergo such raising. The number of case-forms in which */o:/** should have been raised is limited, certainly a minority within both definite and indefinite paradigms, see §4.63n1, and so it is somewhat surprising that *-ost* is commoner than *-ast* in OE.

4.68 As observed in §4.61, the original comparative morpheme inherited from PIE was **-iz-*, and this was paralleled in the superlative morpheme **-ist-*. In OE this structure is regularly found in only a small number of

adjectives, mostly of high frequency. As is also stated in §4.61, both morphemes cause *i*-umlaut. The adjectives which most frequently follow this formation are these:

eald <i>old</i>	yldra	yldest
geong <i>young</i>	gingra	gingest
hēah <i>high</i>	hýrra	hýhst
lang <i>long</i>	lengra	lengest
sceort <i>short</i>	sýrtra	sýrtest

Several of the above forms are subject to normal dialect variation. Hence, for compared forms of *eald*, EWS has *ieldra*, *ieldest*, see Hogg (1992b: §§5.163ff.), Angl has *ældra*, *ældest* (beside positive *ald*), see *ibid.*: §5.79(2a); compared forms of *hēah* include EWS *hīerra*, *hīehst*, see *ibid.*: §§5.163ff.;¹ in LWS, *iung* appears frequently in the positive alongside *geong*; on this and regular forms in other dialects, see *ibid.*: §§5.60–2.

¹ But for the difficult geminate *-rr-* in *hýrra*, see the discussion in Hogg (1992b: §7.91n1).

4.69 Two types of analogical levelling are often found amongst this group of adjectives: (i) the effects of *i*-umlaut (and other changes) may be levelled away; (ii) the irregular superlative inflexion may be replaced by the regular inflexion. These types are discussed under (1) and (2) below.

- (1) Of the above adjectives, two show quite frequent levelling in favour of unumlauted forms, namely the compared forms of *geong* and *hēah*. In WS we find, alongside *gingra*, *gingest*, the predicted unumlauted forms, see Hogg (1992b: §5.64), *giongra*, *geongra*, *iungra*, *geongest*, all without umlaut. Levelled forms are less frequent, but they can be found in both EWS and non-Ælfrician LWS. In WMerc, levelled compared forms are regular, hence PsGl(A) *iungra*, *gungra*, *gungest*, all from positive *iung*, *gung*. Similar forms are found occasionally in Nbr, e.g. Li *giungra*. More commonly, however, especially in Ru1, unumlauted forms are found, e.g., *gingra*, *gingest*. It is most probable, however, that these, too, are levelled forms, but in which levelling is in favour of the compared forms rather than the positive, the same texts also having positive *ging*;¹ note also PsGl(A) 148.12 *gingrum* dat.pl.² For compared forms of *hēah*, two types of levelling may be observed. Firstly, the effects of *i*-umlaut may be levelled away, so that forms such as comp. *hēara*, *hēarra*, *hēahra* can be found.³ Levelling is more frequent in the superl., so that alongside *hýhst* we find a substantial number of examples of the type *hēahst*,⁴ which in LWS may, see further

below, be subject to palatal monophthongization, see *ibid.*: §§5.119–23, and hence arise the frequent types *hēhst*, *hēxt*, see *ibid.*: §7.6. Secondly, it will be observed from the above that normally in WS, medial *-h-* is regularly restored in the superl. and frequently so restored in the comp.⁵ It is difficult to determine whether some forms discussed above, e.g. *hēhst*, are the result of palatal monophthongization, as suggested above, or, when outside of Ælfric, of Angl influence on the root vowel.^{6,7}

- (2) There are a few forms in which a vowel appropriate to the alternative suffix is found, the most frequent occurrences of which are for *yldost* ‘oldest’ (6× in Ælfric). It should be noted that such replacement has no effect on the preceding unlauded vowel. Alternatively, and mostly in LWS,⁸ syncopated forms occur, despite the following consonant cluster, hence *yldsta*, *gingsta*, *lengsta*.⁹ Such syncopated forms can also be found with some compared forms of *strengē*, see §4.70, and several superlative adjectives, see §4.71.

¹ See further Hogg (1992b: §5.64&n3), including the reference there to the alternative view presented in Campbell (1977: §176n2).

² The apparently positive PsGl(A) 118.9 *ging*, however, glosses *iuenior* and must surely be an error.

³ They are not, however, very frequent and are usually restricted to a few texts. Thus, for example, the great majority of instances of *hēarra* are to be found in GenB, and none are to be found in the major EWS texts or in Ælfric. However, it should be noted that comparative forms as a whole are infrequent, and therefore the absence of relevant examples may be accidental.

⁴ On the status of *-h-*, also very infrequent *-g-*, see n6 below.

⁵ Examples of the superl. without *-h-* are particularly rare.

⁶ Rare examples of medial *-g-*, e.g. PPs 117.21 *hēagost*, are surely due to orthographic equation of <h> and <g>, see Hogg (1992b: §7.64).

⁷ Typical forms in Angl are comp. *hēra*, superl. *hēst* (positive *hēh*, with smoothing). These perhaps show levelling from the positive (rather than smoothing), as supposed by Campbell (1977: §658n6), although the results would be identical. But such analogical change is not required, as they are the regular phonological developments of the expected forms, e.g. **hēahist-* > **hēhist-* (umlaut) > **hē-ist-* (loss of [h]) > *hēst* (elimination of hiatus). NNbr (Li, DurRitGl) strongly favours retention of the suffixal vowel, i.e. *hēist* and variants, but this is absent from both Ru2 and Merc.

⁸ But note Or 97.18 *ieldstena* 23.24 *gingst*.

⁹ And hence, by analogy, uninflected *yldst*, *gingst*, *lengst*, *scýrtst*.

4.70 Aside from the words cited in §§4.68–9, a few words show sporadic examples of the older suffixes: note *brædre* ‘broader’ (incl. Or 15.27, 123.21), Alex 671 *gehliuran* ‘warmer’, Alex394, ÆHom 16.134 *grýt(t)ra* ‘greater’. Probably different from either of these are the compared forms *strengra*, *strengest* (positive *strengē* ‘strong’), both of which are more frequent than unumlauted *strangra*, *strangest* (positive *strang*).¹ Since the commoner positive form is *strang*, it seems probable that the alternative suffix types

predominate because there is a clear preference for umlauted compared forms, perhaps in parallel with *lang*.²

¹ An *u*-stem in origin that has merged with the *a/ō*-stems (*strang*) or *ja/jō*-stems (*streng*).

² Evidence that the older suffix type is retained comes from occasional syncopated *strengsta* (incl. Or 3×).

4.71 All the suppletive adjectives discussed in §4.64 show the older formation of compared forms with the suffixes **-iz-*, **-ist-*, and hence in WS the syncopated forms *bet(t)ra*, *betst*, *wyrst*, *lǣst* occur.¹ These adjectives also show much simplification of consonant clusters, as in *best*, *sella*, *wyrst*, *lǣssa*, see Hogg (1992b: §§7.80ff., 7.91–2).^{2,3} The form LawAbt 56 *lǣrestan* for later *lǣs(es)tan* is apparently an archaism (cf. OFris *lǣrest*), showing the effect of dissimilation in PGmc **laisist-* > **laizist-*, see Oliver (2002: 30).

¹ On the latter two, see Hogg (1992b: §6.24(2)); on syncope in the former two, *ibid.*: §6.67&n2. Note that Beo 947, 1759, 1871 *betsta(n)* is shown by the metre to be a scribal substitution for *betesta(n)*, see Fulk, Bjork and Niles (2009: 174).

² Forms of minor interest include examples of *betost*, *sēlost*, *sēlust*, where the newer suffix has apparently replaced the umlauting suffix, but, cf. §4.69(2), without affecting the preceding umlauted vowel.

³ The failure of *i*-umlaut in *māra* ‘greater’ is a result of hiatus resolution in Gmc, so that the disyllabic sequence **-ai-* became a diphthong and hence developed normally to OE *ā*, cf. Girvan (1931: §312A). Thus, compared forms of this word should never show umlaut, as in Nbr *māst*, *maast*. But the regular form of the superl. outside Nbr is *mǣst*, in parallel with *lǣst*. This may be due to the analogical re-addition of **-ist-* after the monophthongization of **ai*, producing **mā-ist-*.

4.72 As was mentioned in §4.64(1), two groups of de-adverbial adjectives occurred, e.g. *innemest* ‘inmost’. Neither group has positive forms distinct from the positive adverb, although in some cases noted further below the positive form of the adverb may have acquired adjectival function. These groups are discussed in §§4.73–4 below.

4.73 The older of these two groups, wherein the normal comparative suffixes are added directly to an adverbial base form, is represented by the following words:

feorr <i>far</i>	fyrra	fyrrest
nēah <i>near</i>	nēarra	nȳhst
ǣr <i>earlier</i>	ǣrra	ǣrest
fore <i>before</i>		fyr(e)st

These adjectival forms show the same variations as other adjectives, both through normal phonological change, e.g. variation between *fyrra* and *firra*,

and by analogy, so that, for example, compared forms of *nēah* parallel those of *hēah*, see §4.69(1).¹

¹ Of the positive forms, *feorr*, *nēah* and *ǣr* can occasionally also be used as adjectives, in which event they inflect normally. But *feorr* appears then to be restricted to poetry, and *nēah* to late glosses, as in PrudGl 1.818 *nēagum*, 890 *nēahne*.

4.74 The commoner set of de-adverbial adjectives are constructed as extended forms of adjectives like *forma* ‘first’, *meduma* ‘middling’, *hindema* ‘last’. The suffix *-ma* represents in *forma*, *hindema* a PIE elative construction,¹ to which the normal superlative suffix could come to be added, hence *fyrmost*. This formation was then extended in OE² to a range of de-adverbial adjectives. Typical examples of this set follow the paradigm of *inne* ‘inside’: *inne*, *innerra*, *innemest*. Further examples include *ūte* ‘outside’, *ufan* ‘from above’,³ *neoðan* ‘from below’, *fore* ‘in front’,⁴ *forþ* ‘forth’, *medume* ‘middling’, *æfter* ‘after’, *sīþ* ‘later’, and adjectives of the compass: *norþ*, *sūþ*, *ēast*, *west*. These words may be further divided into two subgroups: those with umlaut in compared form and those without umlaut. The former group potentially comprises all words except the points of the compass, although several remained unaffected on phonological grounds, namely *inne*, *sīþ*, *æfter*. Of the remainder, *ūte* and *ufan* show unumlauted alongside unumlauted compared forms, as does *neoþan* occasionally.⁵ The most frequent superlative form of *fore* is the older *forma*, but *fyrmost* is also common, alongside occasional unumlauted *formest*. On the other hand, *forþ* (*furþra*, *forþmest*) is almost always unumlauted.^{6,7} The second type, the points of the compass, are hardly ever unumlauted,⁸ e.g., *norþerra*, *norþmest*, see §4.75.

¹ Compare Lat. *summus* ‘highest’, and see further Szemerényi (1996: §7.8.6).

² But it is also found in Gothic, where *frumsts* ‘first’, *bindumists* ‘last’, *aúbumists* ‘highest’, *aftumists* ‘last’ and *spēdumists* ‘last’ are found. Further Got forms found only in the positive are *innuma* ‘inner’, *iftuma* ‘next’, *bleiduma* ‘left’. Other early Gmc languages show no traces of the construction.

³ Note also the superlative form *ȳmest*, related to Go *aúbumists*, not *ufan*, see n2 above.

⁴ But see further below.

⁵ In the last of these, unumlauted and unumlauted forms are difficult to distinguish, due to the variable application of back umlaut, but CP 41.301.21 *niedemesð* is a probable example.

⁶ We have noted only the late charter form Ch 1145.6 *fyrþmest*. But the superlative *forþmest* is confined to (frequent) examples in Nbr, the one exception being an instance in the Merc Ru1.

⁷ Note also Beo 752 *elran* ‘other’ dat.sg.masc. < **alira*-.

⁸ Campbell (1977: §675nn3&4) calls attention to Ch 811 *nyrdre* and Ch 359 *sýþeran*, alongside several instances of adverb *sýð*, all in the Winchester Cartulary.

4.75 There is considerable evidence that in OE the superlative suffix discussed in §4.74 was reanalysed as *-mest*. Thus, as observed above, the

points of the compass had been added to the set of words using *-mest*, although they only exceptionally show the predicted umlaut. In addition, in a variety of mostly later texts, the suffix is occasionally written *-mæst*, less often *-mast*, which suggests confusion and therefore identification with *mǣst* ‘most’.¹ Finally, it should be noted that two further adjectives develop superlatives in *-mest* alongside more frequent forms with *-est*: thus *lætēmost* (mostly Ru2, but also BenRW) alongside *lætēst* ‘latest’ and *midemest* superl. of *midd* ‘middle’ (occasionally in late texts). The semantic connexions between these and the other adjectives with the *-mest* suffix presumably formed an integral part of the development of this new suffix.

¹ The suffix would of course be unstressed in most forms (excluding those like *ȝstemest* and *æftēmost*, see §4.52&n4), and therefore its vowel would be shortened in comparison with the apparent simplex form.

V Adverbs

4.76 In general in OE, adverbs are uninflected for case. The only exceptions to this rule arise when an adverb forms a compound with a preposition (such words also generally serving also as prepositions), in which the adverb may receive a case ending dependent upon the preposition, e.g., *beæftan* ‘behind’, *beforan* ‘before’, *wiþinnan* ‘within’, *wiþūtan* ‘without’, *togēgnes* ‘in return’ and many others. Similarly, adverbial compounds in which the second element is not an adverb may be inflected according to the properties of the uncompounded phrase, e.g., *tomiddes* ‘in the middle’. Neither of the above usages is a property of the inflexional morphology; see Mitchell (1985: §§1380–1427) for the use of case in forming adverbial constructions.

4.77 Compared forms of adverbials are most usually found with de-adjectival adverbials. Such adverbials follow a pattern of comparison parallel to that of adjectives and inclusive of the types of variation found amongst adjectives. The shapes of the comparative and superlative adverbial morphemes differ slightly from those of the corresponding adjectival morphemes in the following general respects. The usual comparative adverbial morpheme is derived from PGmc **-ōz* but without any *n*-suffix as in adjectival **-ōzan-*, cf. §4.61.¹ Final **-z* should have been lost in WGmc, see Krahe and Meid (1969: I, §115), but it appears to have been preserved, to develop to **-r* by rhotacism, under the influence of the adjectival forms. The regular superlative is formed in the same manner as the regular adjectival superlative but without inflexional ending. Thus, the normal mode of comparison can be exemplified by *hearde* ‘severely’, *lēoflice* ‘lovingly’, as follows: *hearde*, *heardor*, *heardost*; *lēoflice*, *lēoflicor*, *lēoflicost*.² A few underived adverbs show the same formation; hence we find: *forþ* ‘forth’, *furþor*; *inne* ‘inside’, *innor*;

oft ‘often’, *oftor*, *oftost*; *ġelōme* ‘often’, *ġelōmor*;³ *seldan* ‘seldom’, *seldor*,⁴ *seldost*; and the adverbs of the compass *norþor*, *sūþor*.

¹ This *-ōz is a PGmc innovation, presumably modelled on the adjective suffix, but it is an early development, as we find already in Gothic *-ōs* alongside *-is*.

² As with adjectives, the superlative ending also occurs as *-ust*, *-ast*, and the parallel variation, with *-ur*, *-ar*, can be found in the comparative. Note that the suffix of the positive degree *-līce* probably contains a long vowel, whilst the comparative suffixes contain a short one. The evidence for length in the positive degree is chiefly metrical, though it is not exceptionless, see Fulk (1992: §227, cf. §§223–5). The evidence that the comparative suffixes contained a short vowel is orthographic, including spellings like *-lecor* (esp. in EWS), *-liocar* (Kt), *-lucor*, *-lecast*, etc. Note that although adj. *-lic-* is never spelt with <e> or <u> in texts by Ælfric, whether amongst the best Ælfrician texts (e.g. ÆCHom and ÆLS) or otherwise, we do find in a text of lesser probative value ÆLet 4 (SigewardB) 792 *lōmlucor* ‘more frequently’. (On the distinction between the best Ælfrician texts and others, see Fulk, 2008: 96n1.) Cf. §4.52.

³ 1x; usually *ġelōmlīcor*, *ġelōmlīcost*.

⁴ Note Met 28.67 *seldnor*.

4.78 As with the adjectives, see §4.68, there are several adverbs which originally formed their comparative with *-iz and hence their superlative with *-ist. Unlike the adverbs discussed in §4.77, these do not analogically retain the comparative suffix (cf. the loss of *-iz in heavy-stemmed *i*-stem nouns, §2.56), and therefore the comparative, if preserved in its original form, is distinguished from the positive only by *i*-umlaut of the root vowel. Thus we find:¹

_____	ǣr, ǣror ² <i>earlier</i>	ǣrest
ēaþe <i>easily</i>	ȳþ	ȳþost
feorr <i>far</i>	fyrr	fyrrest
hēah <i>high</i>	hēar, hēaor ³	hȳhst
lange <i>long</i>	leng	lengest
nēah <i>near</i>	nȳr	nȳhst
_____	sīþ ⁴ <i>later</i>	sīþost
sōfte <i>softly</i>	sēft	sōftost ⁵
tulge <i>firmly</i>	tylg ⁶	tylgest

As with the adjectives of the same type, *i*-umlaut can be levelled away, and this accounts for the forms *ēaþ*, *ēaþost*; *hēar*, etc.; *nēar*, *sōftor*, cf. nn3, 5.

¹ As with the comparable adjectives, these adverbs are subject to normal dialect variation, cf. §4.68.

² The historical form is *ǣr*, but *ǣror*, with a double suffix, is frequent.

³ No unumlauted form of the comparative is attested. The original form is reflected in Got *hāubis*.

⁴ And very rarely *sīþor*, with a pleonastic suffix, cf. n2.

⁵ There are no superlative forms recorded which show umlaut.

⁶ This comparative occurs only at EpGl, ErfGl 743, CorpGl 1636, LS 3 (Chad) 150, in the last meaning ‘rather’ and taking the form *tylig*, and also in the Cotton ms. of the OE translation of the *Dialogi* of Gregory the Great, in the form †*tilg*, also ‘rather’, see Hecht (1900–7: 277). The superlative occurs, as *tylgust*, only at Res 96, whilst *tylgest* is from LS 3 (Chad) 34, a text preserved only in a very late manuscript, though apparently a much earlier composition, strongly marked by Merc features.

4.79 There are four suppletive adverbs, directly comparable to the suppletive adjectives discussed in §4.64(2). These adverbs are:

wēl ¹ <i>well</i>	bet	bet(e)st, best
	sēl	sēlest
yfle <i>badly</i>	wyrs	wyrst, wyrrest
lȳtel, lȳt <i>little</i>	lǣs	lǣst, lǣsest
micle <i>much</i>	mā	mǣst

Such words do not in general show any variation in form which is substantially different from that found in the related adjectives, but note Merc *mǣ* ‘more’, also 2× in Li, plainly influenced by the superlative.

¹ The evidence for the variable quantity of the root vowel is chiefly ME, e.g. Orm’s *wel* beside *well*. The variability is presumably due to variation in clausal stress, see Hogg (1992b: §2.80).

VI Numerals

1 Cardinals

4.80 In dealing with the inflexions of the OE cardinal numerals, it is appropriate to divide them into the following subgroups according to their morphological properties: (a) *ān* ‘1’; (b) *twēgen* ‘2’ and *bēgen* ‘both’; (c) *þrȳ* ‘3’; (d) the numerals 4–12; (e) the numerals 13–19; (f) the higher numerals. This ordering is preserved in the discussion which follows below.

4.81 The numeral *ān* ‘1’ is always declined as an indefinite,¹ thus following the paradigm of *sum* ‘some’, see §§4.13, 4.15. As such it is without further morphological difficulty, except that alongside the expected acc.sg. masc. *ānne* there appears very frequently the form *ǣnne*.² This form reflects a variant of the accusative suffix in PGmc, **-inōn* as compared to the usual **-anōn*, cf. §4.10. In Angl texts particularly, the form *enne* (< *ǣnne* with early shortening, perhaps in low stress, and with subsequent *i*-umlaut, see Hogg (1992b: §5.79(1))) is frequent. The same form occurs occasionally in LWS, including Ælfric.

¹ Such a claim, however, is both controversial and not without difficulty, but the full discussion in Rissanen (1967) and the further analysis in Mitchell (1985: §§536–44) both suggest that *āna*, apparently nom.sg.masc. but of the definite declension, is indeclinable and adverbial in quality.

² Thus, using the data in the *DOEC* we can derive the following frequencies for *ānne* and *ænne*, respectively, in various EWS and LWS texts: CP: *ānne* 5× ~ *ænne* 7×; Or: 7× ~ 24×; ÆLS: 15× ~ 76×; ÆCHom: 2× ~ 69×.

4.82 The numeral *twēgen* ‘2’ and the quantifier *bēgen* ‘both’, which decline in parallel, see §4.83, are inflected for gender in the nom.acc. but not in the gen.dat. Thus we usually find the following forms in LWS:

	Masculine	Neuter	Feminine
<i>Nom.</i>	twēgen	twā, tū	twā
<i>Acc.</i>	twēgen	twā, tū	twā
		All genders	
<i>Gen.</i>		twēg(e)ra	
<i>Dat.</i>		twām	

4.83 Any attempt to reconstruct the PGmc paradigms of these words is fraught with difficulties, many of which are ignored below. The masc. *twēgen* was re-formed in WGmc on the basis of *bēgen*, see further below, and hence does not directly correspond to either NGmc or Gothic forms, e.g. nom. Got *twái*, ON *tveir*.¹ Neut. *tū* corresponds to PGmc **twō*, see Hogg (1992b: §3.26), whilst fem. *twā* is from masc. *twai*.² For the variation between usual neut. *twā* and less frequent *tū*, see further §4.84, but the neut. form is unlikely in origin to be identical to the fem., cf. Girvan (1931: §329) for references to other views. It will be plain that all acc. forms are identical to the nominative. Gen. *twēg(e)ra*, like masc.nom. *twēgen*, is formed by analogy to *bēgen*, but the inflexion is, as with adjectives, from the pronominal system, cf. §4.10. On the earlier, and less common, form *twēg(e)a*, see §4.84. The dat. can be derived from a PGmc instrumental form **twaimiz*. It should be plain from remarks above that *bēgen* follows exactly the same paradigm as *twēgen*, presumably because of their semantic propinquity. The nom. form of the quantifier is derived from compounded **bō* + *jenō*, the second element of which is otherwise seen in OE only in CP(H) 443.25 *geonre* ‘yon’ dat.sg.fem.³

¹ See Bammesberger (1985a: 368–9), with references.

² In Got, *twái* is masc., but see Prokosch (1939: §99).

³ The simplex is found in Got *jáins* ‘yon’, and compare OE *geond* ‘throughout’.

4.84 The most obvious dialectal variation concerning these words is the presence of *i*-umlaut in the vowel of the stem. Umlaut is found regularly in nom.masc. in all dialects, and similarly in the acc.gen., but in Angl the

stem vowel most commonly remains rounded, e.g. Nbr *twōēge*, with the exception of Ru1, where only unrounded forms like *twēgen* and *twāgen* occur,¹ and PsCa(A) 6.2 *twēgen* alongside gen. *twōēga*. Kt has Ch 1482 *twāgen*. In the dat., *twām* without *i*-umlaut is the regular form in LWS and even in earlier texts such as Lch. It also appears alongside *twāem* in clearly EWS texts. By contrast, *twām* is absent from Angl. It is most probable that *twām* is formed on the analogy of *twā*.² The most important of the other variations concerns the nom.acc.neut., where by far the more frequent form is *twā*, and *tū* is less common, being absent, for example, from Ælfric.³ Generally, *bēgen* declines in parallel with *twēgen* throughout, from dialect to dialect.

¹ On the latter form, see Hogg (1992b: §5.192n1).

² Less likely is the possibility suggested by Brunner (1965: §324A1) that it derives from a Gmc dat. **twaimuz*.

³ However, in lNbr *tuū* is usual in the neut. and *twā* in the fem.

4.85 *þrȳ* corresponds to PGmc **þrīz* < PIE **trei-es*, with subsequent loss of *-z, and the variant EWS forms *þrīe*, *þrī* are usually explained as due to the influence of the nom.acc.masc. ending *-e* of adjectives, see further §4.86, whereas all other nom.acc.gen. forms are directly derivable from Pre-OE neut. **þriju*, fem. **þrija*, with the normal endings of indefinite adjectives, see §4.13. The dat. corresponds to PGmc **þrimiz*. The usual LWS paradigm is as follows:

	Masculine	Neuter	Feminine
<i>Nom.</i>	þrȳ	þrēo	þrēo
<i>Acc.</i>	þrȳ	þrēo	þrēo
<i>Gen.</i>		þrēora	
<i>Dat.</i>		þrim	

4.86 The major difficulty in the declension of *þrȳ* is related to the source of the masc.nom. form. That form appears to be derived from PGmc **þrīz*, with loss of final *-z, see Hogg (1992b: §4.10), and then addition of the pronominal inflexion *-e*, see §4.14, also Brunner (1965: §324A3), Girvan (1931: §331). It may be noteworthy in this context that Angl texts show no distinction of gender in this numeral, which is always *þrēo* or predictable variants thereof.¹ Other dialectal variants mostly fall within the normal limits of phonological variation, e.g. EWS *þrīe*, LWS *þrī*, EWS *-īo-* for *-ēo-*, and a wide variety of diphthongal spellings in Nbr, such as *ðrīu*, *ðrīo*, *ðrīa*, *ðrēo*, *ðrēa*. Li also has a weak gen. of the form *ðrēana*, and, for reasons unknown, the vowel of the dat.pl. must have been lengthened, to judge by the frequent spelling <ðriim> (also in DurRitGl) alongside <ðrim>; perhaps the lengthening is due to the influence of dat. *twāem* ‘2’.

¹ But note Kt Ch 1500.19 *ðrīe*, Ch 1482.60 *ðrēo*, both neut., and presumably the former of these is disyllabic.

4.87 Like the numerals discussed above, the numerals 4–12 can be used both as nouns and as adjectives. Used as attributive adjectives they are usually undeclined,¹ but elsewhere they may decline. In declension the following type of paradigm is usual:

	Masc./Fem.	Neut.
<i>Nom.</i>	fēow(e)re <i>four</i>	fēow(e)re, -u, ² -o
<i>Acc.</i>	fēow(e)re	fēow(e)re, -u, ² -o
<i>Gen.</i>	fēow(e)ra	fēow(e)ra
<i>Dat.</i>	fēow(e)rum	fēow(e)rum

Most variation in these numerals is the result of regular change, including reduction and interchange of unstressed vowels, particularly in Nbr, where it is difficult to assess the values of the several spellings.³ In WS the neut. is most usually spelt with *-e*, showing loss of all gender distinction. In LWS the most frequent forms of the undeclined numerals are as follows: *fēower* ‘4’,⁴ *fif* ‘5’, *six*, *syx* ‘6’, *seofon*, *syfon* ‘7’,⁵ *eahta* ‘8’,⁶ *nigon* ‘9’, *tȳn* ‘10’, *endleofan* ‘11’, *twelf* ‘12’. As with the inflected numerals, dialectal and other variations are mostly phonological. Because the first constituents of compounds are also undeclined, it is difficult to distinguish undeclined numerals from compounded elements. Under some circumstances, when numerals are assumed not to form compounds with following nouns, they in fact create metrical anomalies in verse.⁷ Such anomalies are securely attested, however, only for numerals with suffixed *-hund* and *-niht* (and cf. PDE *fortnight*, *sennight*), and so it is probably safest to assume that undeclined numerals may form compounds only with other numerals and with *-niht*, and perhaps also *-dæg*.⁸ See also §3.146.

¹ See, however, Mitchell (1985: §552) for discussion and citation of occasional examples to the contrary.

² **Fēoweru* is not found, but cf. *fifu*.

³ In Nbr the nom. acc. may also be spelt with final *-a*.

⁴ On the development of the word in Gmc, see Hamp (1976), Stiles (1985–6).

⁵ Also both with final *-an*.

⁶ SNbr Ru2 has *æbtowe* (6×) from inflected forms; note also Rid36.4 *ehtuwe*, metrically trisyllabic, which is the same formation.

⁷ Thus, for example, unless the element following the numeral is assumed to form a compound constituent with reduced stress, verses of Sievers’s type B must often be assumed to have substantial stress in the second drop, e.g. GenA 1193 *and nigonhund ēac*, though the poets otherwise generally avoid stress in the second drop; and verses of Sievers’s type A3 must be assumed to end in two separate words, e.g. GenA 1349 *nū ofor seofon niht*, though this pattern is studiously avoided except in late poems, see Fulk (1992: §§238–45, 291).

⁸ For discussion, see Fulk, Bjork and Niles (2009: 322–3).

4.88 The numerals 13–19 are formed from their corresponding simple numerals by the addition of *-týne* (EWS *-tiene*, nWS *-tēne*), and if inflected may show gen. *-a*, dat. *-um*.

4.89 Amongst the higher numerals, 20–60 are formed with the suffix *-tig*,¹ and those from 70 to 120 with, in addition, prefixal *hund-*, hence, e.g., *twēntig* ‘20’, *hundseofontig* ‘70’, *hundtēontig* ‘100’,² *hundtwelftig* ‘120’.³ The prefix is already sometimes absent in EWS, e.g. Or 82.21 *seofontig* ‘70’, and this variation continues in later texts.⁴ The suffix *-tig-* does not behave metrically like the adjective suffix *-ig-*, see §4.47, for whilst *-ig-* before a vocalic inflexion is usually not a syllable in scansion, *-tig-* always bears ictus, see Fulk (1992: §231). For ‘200’, etc., compounds of the simple numeral and *hund* (rarely *hundred*, e.g. *DOEC* has *fifhund* 4× and *fif hund* 38×, *fifhundred* 1× and *fif hundred* 8×) are formed.⁵ *þūsend* ‘1000’ is also neut., with regular inflexion in both sg. and pl., e.g. *þūsendu* ‘thousands’, with variation of the inflexional vowel, although it may also be with zero inflection or uninflected.

¹ On the etymology, see Bammesberger (1986c).

² *Hund* is itself a neut. noun ‘100’, and this, alongside *hundred* ‘100’ (usually Nbr *hundreð* and similar, under Norse influence), both either declined or not, is an alternative means of expressing the numeral. But *hund-* as a prefix in *hundseofontig*, etc., has a different derivation, see Bosworth and Toller (1898: *hund-*). The reason for confinement of the prefix to the decades above ‘60’ is disputed: see Lühr (1977), and more recently Mengden (2005, 2006, 2010: 87–94), but especially Nielsen (1990), with a conspectus of scholarship, advocating the purely phonological solution of Szemerényi (1960). Most solutions assume a semantic motive.

³ Also late *hundtwēontig*.

⁴ In Nbr, forms which show the weakened prefix *un-* occasionally occur, e.g. LkHdGl(Li) 41 *unseofuntigum* ‘70’.

⁵ The difference between *fifhund* and *fif hund* is purely a matter of editorial choice rather than of a genuine linguistic difference. See §4.87n6.

2 Ordinals

4.90 The ordinals up to ‘12’ are as follows (in their most usual LWS forms): *forma*, *fyrmeſt*, see §4.74, also *āreſt* ‘first’, *ōper* ‘second’,¹ *þridda* ‘third’, *fēorþa* ‘fourth’, *fifþa* ‘fifth’, *sixta*, *ſyxta* ‘sixth’, *seofopa* ‘seventh’,² *eahtoþa* ‘eighth’, *nigoþa*, ‘ninth’, *tēoþa* ‘tenth’,³ *endleoſta* ‘eleventh’ (with many minor variants, e.g. *endleſta*, *-lyſta*, *enleſta*),⁴ *twelfta* ‘twelfth’. The ordinals from 13 to 19 are formed with suffixal *-teoþa*, e.g., *þrēoteoþa*.⁵ The ordinals for 20–120 are doubly suffixed by *-tigoþa*, which shows wide variation in form, but without particular significance from a morphological point of view. The cardinal numerals *hund*, *hundred*, *þūsend* are without corresponding ordinals of their own.

¹ Note also the pair *ǣrra* ‘former of two’ and *ǣfterra* ‘second’.

² Nbr and Ru1 have *seofunda*, *siofunda*.

³ But in northern texts, or texts with some northern influence, we find that Li, Ru2 have forms of the type *tei(ġ)ða*, *tēġða*, and that Bede and the *Martyrology* both have *tēogoða*.

⁴ And in Nbr and Ru1 *ǣlefta*, also Ru1 *ellefta*.

⁵ But some northern(-influenced) texts use *-teġ(e)ða* and variants thereof, cf. n3 above. On the etymology of the suffix, see Bammesberger (1986c).

4.91 All the ordinals from ‘third’ onwards, together with *forma* ‘first’, *ǣrra* ‘former of two’ and *ǣfterra* ‘second’, decline regularly as definite adjectives. By contrast, *ōþer* ‘second’ always declines as indefinite. The ordinals *fyrrest*, *ǣrest*, which have a superlative suffix, may be either indefinite or definite according to the usual syntactic conditions for adjectives, see §§4.1–2.

Pronouns

I Introduction

5.1 We may distinguish four principal types of pronoun which OE inherited from PGmc: (1) demonstrative; (2) anaphoric; (3) interrogative; (4) personal.¹ From an historical-etymological point of view, the first three types are closely related (although they may reflect a variety of stem-formations, see further below), and their inflexional systems show, by one means or another, the categories of number, case and gender which are equally present in nouns and adjectives. By way of contrast, the personal pronouns in this inherited system do not show gender and show signs of formation from a variety of stems, several of which are not found elsewhere in the pronominal morphology. This has led some scholars to suggest that the traditional word-and-paradigm approach is somewhat inappropriate to these pronouns, see for example Prokosch (1939: §98), but see Szemerényi (1996: §8.4) for an alternative, more positive, view. In any case, it is necessary to be aware that from the standpoint of Proto-Indo-European, the personal pronouns comprise only the first- and second-person pronouns, and that by contrast the so-called third-person pronoun is a weakened demonstrative pronoun which patterns similarly to other demonstratives and which in Gmc may best be classified as the anaphoric pronoun. The four principal types of pronoun are discussed in the following sections in the order presented above, followed by briefer discussion of indefinite and other pronominal types.

¹ For a brief discussion of other pronoun types, see §§5.33–9 below.

5.2 It is a consequence of the method of presentation outlined in §5.1 that the first- and second-person pronouns are discussed separately from the third-person pronouns. It must be emphasized that this separation is

motivated only on morphological grounds. Syntactically, these personal pronouns share all their principal characteristics.

II Demonstrative pronouns

5.3 OE had two demonstrative pronouns,¹ *sē* ‘that’, *þēs* ‘this’. These pronouns contrast in the deictic features of ‘distance’ and ‘proximity’, and the wider and more frequent use of the former suggests that it is the unmarked member of the pair, without necessarily ever equating to the ‘definite article’, which more probably began to develop during the ME period.²

¹ But a third demonstrative apparently occurs at CP(H) 443.25 *to ġeonre byrg* ‘to that city’. Its status is discussed in Mitchell (1985: §312), with a further reference.

² There are both morphological and syntactic justifications for this claim, see further Quirk and Wrenn (1957: §117), Mitchell (1985: §328), Traugott (1992: 171–2) and Fischer (1992: 217–21).

5.4 The usual paradigm of *sē* ‘that’ in LWS is as follows:¹

	Masc.	Neut.	Fem.	Plural
<i>Nom.</i>	<i>sē</i>	<i>þæt</i>	<i>sēo</i>	<i>þā</i>
<i>Acc.</i>	<i>þone</i>	<i>þæt</i>	<i>þā</i>	<i>þā</i>
<i>Gen.</i>	<i>þæs</i>	<i>þæs</i>	<i>þære</i>	<i>þāra</i>
<i>Dat.</i>	<i>þāem</i>	<i>þāem</i>	<i>þære</i>	<i>þāem</i>
<i>Instr.</i>	<i>þȳ, þon</i>	<i>þȳ, þon</i>	—	—

Departures from this paradigm and variant forms in other dialects are discussed below in §5.8. This pronoun could be either demonstrative or relative. In the latter function it might serve alone, or it might be combined with *ðe*, a construction chiefly of syntactic interest (see Mitchell 1985: §§2103–362), though it raises the morphological question of whether a construction like *sē þe* is one word or two. There is some reason to think that it is indeed a compound, since the first constituent frequently appears in verse in places where it represents a violation of Kuhn’s first law if it is a separate word.²

¹ On vowel quantities in stressed and unstressed pronouns, see Hogg (1992b: §§2.80, 5.198) and §§5.6, 5.17(1) below.

² For example, in Beo 1839 *þāem þe him selfa dēah*, the demonstrative is not clause-initial and so ought to be stressed if it is a separate word. See Fulk, Bjork and Niles (2009: 129 note on Beo 183b), with references. Some editors hyphenate such constructions, e.g. Pope (2001). Rather different is the question whether a conjunctive construction like *oþ þæt* is one word or two, a question about which editors likewise disagree. For reasons to regard it as two words, at least in Beo, see Fulk (2007b: 168–71).

5.5 The PGmc system from which the OE derived in all essentials appears to have been based primarily on the PIE deictic stem **to-/tā-*, supplemented in the nom.sg. utter by **so-/sā-*, from an alternative deictic stem. This PGmc system appears to have had broadly the following form, although the variety of forms in the later dialects makes it impossible to reconstruct a unitary system for any stage of PGmc:¹

	Masc.	Neut.	Fem.	Plural ²
<i>Nom.</i>	*sa	*þata	*sjō ³	*þai
<i>Acc.</i>	*þana	*þata	*þō	*þans ⁴
<i>Gen.</i>	*þes ⁵	*þes	*þairja ⁶	*þaira
<i>Dat.</i> ⁶	*þaimi	*þaimi	*þairja	*þaimi

The paradigm is strongly influenced by analogy to the anaphoric pronoun, §5.15, see Seebold (1984: 68–9). The OE instrumental forms, although undoubtedly Germanic in origin, are so distinct from those in the other Gmc dialects that it will be more appropriate to delay their discussion to §5.7 below.

¹ Ignored here are various changes, in particular very early changes from PIE and those later changes in PGmc and WGmc caused by reduction and loss in unstressed syllables, except where these are directly relevant to the OE development. Other issues of primarily Gmc interest are discussed in the footnotes below. For all forms discussed in these footnotes, reference to Prokosch (1939) or some other handbook of Germanic, e.g. Hirt (1932), is essential.

² Got, ON and OHG show distinct forms for each gender in the nom.acc.pl., and Got also has a separate form for the fem.gen.pl. In both OE and OSax the masc. forms have been generalized throughout the plural.

³ The form underlying WGmc is **sjō*, in contrast with Go *sō*, ON *sú*.

⁴ In all the WGmc dialects, and as in the nominal declensions, the acc.pl. is replaced by the nom.

⁵ OE is exceptional in having the PIE stem form **to-so* rather than usual **te-so*. This appears to be a late analogical development, see Beekes (1988).

⁶ In the gen.fem. and throughout the dat.sg., OE (and ON) appears to have generalized the diphthongal stem vowel of the corresponding plural. In the same case forms, **-i* or **-j-* must be assumed in order to account for the presence of umlaut in OE. However, the sources of **-i* and **-j-* are different, see §5.6.

5.6 Vowels and diphthongs might be long or short by context: long vowels would be shortened when unstressed, and final short vowels would be lengthened when stressed, see Hogg (1992b: §5.198) and §5.17(1) below. The majority of the forms cited in §5.5 develop straightforwardly into the LWS forms presented in §5.4, but the following present issues of difficulty or interest:

nom.sg.masc.: The normal rules of OE syllabification, see Hogg (1992b: §§2.80, 5.198), would have required lengthening of *se* > *sē* if stressed,

in order to conform to the minimal -VV structure required for a stressed syllable. To follow Quirk and Wrenn (1957: §65), and suggest that in pronominal position the usual form was *sē* but that in dependent positions the form was *se*, may be too strong a generalization,¹ but it remains useful as an heuristic.

nom.sg.fem.: The LWS form is regularly derived from earlier **sjō*, see §5.5n3.

gen.dat.sg.fem.: *I*-umlaut is caused by *-j-*, which element is of PIE origin, see Szemerényi (1996: §8.21). For unumlauted forms, see §5.8n5.

dat.sg.masc.neut.: The Germanic ending which is the cause of *i*-umlaut in the OE form appears to correspond to that of Old Church Slavonic instr. sg. *těmī*, and the diphthong in the root appears to have been extended from the plural, but in other respects the OE form is regularly derived.

acc.pl.: As noted in §5.5n4, the acc.pl. has been replaced by the nom.pl.

dat.pl.: The presence of umlaut is regular under the assumption that the Gmc form equates to Old Church Slavonic instr.pl. *těmi*.

¹ The comments of Mitchell (1985: §329) are entirely apposite: ‘...while we must concede that dependent *se* sometimes carries stress, we have no certain means of deciding when it does in any but the most obvious examples’.

5.7 The two forms traditionally described as ‘instrumental’, namely masc.neut.sg. *þȳ*, *þon*, neither of which is decisively related to forms in other Gmc languages, pose particular difficulties. If the former is to be derived from a PGmc form **þō* > **þū* (cf. OSax *thiu* < **tjō*), the presence of *i*-umlaut is not obviously explicable. Perhaps it may most plausibly be derived from **þū* to which has been added the adjectival instr. **-ī* < **-ei*, see §4.10, also Girvan (1931: §315). *þon* may show the same element as in the first constituent of Got *þana-meis* ‘still’, again suggested by Girvan (1931).

5.8 There are a number of systematic deviations from the LWS paradigm presented in §5.5. The most widespread of such variants occurs in dat.sg.masc.neut. and dat.pl, where unumlauted forms, i.e. *þām* alongside *þēm*, are frequently found in WS.¹ It may then be best to explain very frequent LWS *þēra* gen.pl. as resulting from extension of the variation-type in the dat.pl. to the gen.pl. A second type of variation occurs in the masc.acc.sg. *þone* and masc.neut.instr. *þon*, which are sometimes, and in all dialects, found as *þane*, *þan*. This, however, is a purely phonological development, albeit obscure, see Hogg (1992b: §6.4), also Hogg (1996).² A third variation which is important for the later history of the language and which is restricted to Nbr and the Merc Ru1 is the appearance of *ðe* alongside masc.nom.sg. *se*. In Nbr this formation is paralleled in the fem. pronoun, i.e. *ðiu*, and variants.³ There are a number of further variant forms, but

these are usually the result of regular sound change, e.g. EWS *sīo* for fem. *sēo*, and PsGl(A) *þet*, *þes* due to Second Fronting.^{4,5} On the use of *ðone* and *þæt* with all genders in late manuscripts, see Millar (2002a, b), with references.

¹ Also occasionally in Kt, perhaps most frequently in OccGl 49. Single examples in Nbr are probably not significant.

² In LWS there is a further development to *þæne*, which is very difficult to explain; for one attempt, see Campbell (1977: §380). The same type can also be found in Angl, with the significant exception of PsGl(A), but in those dialects the form *þene* is also found, as might be expected, since <æ> and <e> do not contrast before nasal consonants, see Hogg (1992b: §5.78), Davidsen-Nielsen (1984), and thus it is the rarity of *þene* in Ælfrician LWS that requires explanation. Although Campbell argues that this form shows full stress, that would seem phonologically improbable, and it is more likely that it is a completely unstressed form (which may explain the LWS distribution of <æ> and <e>). The same variations are equally found in adverbial *þonne*, in *hwone* (acc. of *hwā*), *hwonne*, i.e. *hwane*, *hwæne*, Angl *hwæn(n)e*, *hwenne*. Nbr also has *hwoenne*, which would appear to be due to rounding after /w/ and thus confirms stress, as suggested by Campbell.

³ Amongst variants, Ru1 occasionally has acc. *þene*. It is difficult to know whether this is an extension from nom. *þe*, i.e., *þe+ne*, or whether it is related to the forms discussed in n2 above. Either explanation is possible.

⁴ Gen.pl. *ðeara* in PsGl(A) is usually explained as from unstressed *ðara*, which is re-stressed and is then subject to second fronting and back umlaut. The same form occurs in Kt charters of the 9th century, presumably under the influence of Mercian orthography. The later OccGl 49 has no relevant examples.

⁵ Other minor variants include the following: (1) PsGl(A) usually has nom.sg.fem *sīe* against *sēo* (1×), and such spellings in that dialect probably either indicate a diphthong or are simply digraphic, see Hogg (1992b: §5.169), and note the rare *sīu*, *sīe* in Ru1 alongside usual *sēo*, *sīo*; (2) The mainly LWS fem.gen.dat. *þāre* alongside usual *þære* may be the result of confusion caused by the alternative forms of the corresponding masc.neut.dat.sg., see above; similar forms can be found in Kt texts, and OccGl 49 has also *ðāra* with confusion of the ending; (3) the fem.gen.dat.sg. occasionally appears as *þēre* (or *þere?*), and although the form is infrequent in WS with the exception of late charters, it is dominant in PsGl(A) and may represent a regular unstressed variant; (4) in Nbr are found apococated forms of the masc.acc.sg., i.e. *ðon*, and fem.gen.dat., i.e. *ðær*, most often in the dat., see also §5.12.

5.9 The usual paradigm of demonstrative *þēs* ‘this’ is as follows:¹

	Masc.	Neut.	Fem.	Plural
<i>Nom.</i>	þēs	þis	þēos	þās
<i>Acc.</i>	þisne	þis	þās	þās
<i>Gen.</i>	þisses	þisses	þisse	þissa
<i>Dat.</i>	þissum	þissum	þisse	þissum
<i>Instr.</i>	þÿs	þÿs	_____	_____

Deviations from this paradigm and variant forms in other dialects are discussed below in §§5.10–12.

¹ As with *sē*, §5.4, vowels in the paradigm might be long or short by context: see §5.17(1).

5.10 This strongly deictic demonstrative originates in a compound structure of which the first constituent was the PIE demonstrative stem **to-/so-*, to which was added an uninflected suffix. But even in PGmc it would appear that this system had been restructured, so that only in the masc.nom. *hēs*, fem.nom. *hēos*, fem.acc. *hās*, nom.pl. *hās* and instr. *hȳs* are there relics of the older system. In other positions, regular inflexions are added to the stem *his-*.

5.11 The most frequent of the variations which have a purely phonological cause are as follows. Firstly, in LWS, forms such as gen.sg. *hysse*, which show laxing of /i/, occur often, although never as frequently as unaxed *hisses*, see for further details Hogg (1992b: §5.173). The occurrence of the inverted spelling *his* instr.sg. for *hȳs* demonstrates that weakly stressed forms with shortening of the vowel must have occurred, and presumably weakly stressed forms equally occurred elsewhere, even when spelling is unaltered. Secondly, where *-ss-* appears medially, the geminate may be simplified, resulting in *hises* for *hisses* and other parallel variants. This simplification is almost entirely restricted to WS texts, and it is more often found in LWS than EWS.¹ Thirdly, as the result of exceptional back umlaut with an intervening geminate, see *ibid.*: §5.107, EWS (CP only) and non-Ælfrician LWS have infrequent examples of dat.sg.pl. *hios(s)um*, *heos(s)um*.²

¹ Elsewhere, examples are most frequent in NNbr. The Kt form *ðisem* in Ch1197.21 may be a further example even if Campbell (1977: §378n2) is right that *-em* is by analogy to *hēm*.

² Sporadic examples can be found elsewhere, hence PsGl(A) 30.24 *ðeossu* dat.pl. (presumably for *ðeossum*), and in Kt Ch287 *ðeassa* gen.pl., Rec6.5 14 *ðeosse* dat.sg. See Fulk (2008).

5.12 Amongst morphological changes, the following are of particular interest. In LWS, gen.dat.sg.fem. and gen.pl. often adopt the adjectival inflexions *-re*, *-ra*, i.e. *hisre*, *hisra*, and this most usually leads to phonological epenthesis, see Hogg (1992b: §6.41), hence *hissere*, *hissera*. In Nbr similar forms occur, but there is usually apocope in the gen.dat.sg. and absence of epenthesis in the gen.pl., hence sg. *ðisser*, pl. *ðisra*.¹ But forms apocopated to end in *-r* are more frequent in the dat.sg. than in the gen.sg., cf. §§5.8, 5.27. Secondly, in Nbr only there are clear signs of morphological restructuring, in particular of the fem., where a new dat. form *ðasse* appears alongside the more usual types such as *ðisser*, see above. This change is equally extended to the dat.pl. *ðassum*.² Finally, all dialects develop a masc.sg. form of the type exemplified by occasional WS *heosne*, which may be uncertainly related to the back umlaut type discussed in §5.11 above.

¹ Note also MtGl(Ru) 21.21 *þissere* dat.sg.fem.

² Most probably such forms are related to nom.acc.pl. *ðās*.

5.13 The only other demonstrative form which requires attention, but see also §5.3n1, is *þæge* nom.acc.pl., which occurs in a few rather late WS texts. This is a form borrowed from ON *þeir* but with either demonstrative or (less often) relative function. It is not to be confused with the ME development of pronominal *they*.¹

¹ It is also rarely found as fem.acc.sg. as a substitute for *þā*, as at LS 24.70. Since this can arise only through the formal equation of fem.acc.sg. and nom.acc.pl., it is clear the LWS forms are quite different from the ME ones.

III The anaphoric pronoun

5.14 With a few clear exceptions, there is a general similarity between the anaphoric pronoun which serves as the third-person pronoun in Old English and that attested in Gothic, where we find *is* ‘he’, *ita* ‘it’, *si* ‘she’. In comparison we find in OE *hē*, *hit*, *hēo*. The explanation for the discrepancy, although see further §5.15, is that whereas Gothic displays forms which derive from, broadly speaking, a PIE **i-* demonstrative, cf. Lat. *is*, the OE pronoun has the stem PIE **ki-*, cf. Lat. *cis*, and cf. Got *himma daga* ‘today’, *und hina dag* ‘to this day’, *und hita* ‘hitherto’, beside usual *imma*, *ina*, *ita*, respectively. In their initial consonant the forms of the anaphoric pronoun in OE most clearly resemble those in ON, which equally present the stem from PIE **ki-*.¹

¹ For forms in the other early Gmc languages, see, for example, Prokosch (1939: §94). It should be noted that there is considerable variation in stem type in all the other Gmc languages. Seebold (1984: 66) argues that forms in *b-* outside of the nom.sg. represent an analogical extension of *b-* in Anglo-Frisian. Got *himma*, *hina*, *hita* show that this need not have been the case. But since the ON paradigm is suppletive, with some forms in initial *þ-* (nom.pl.masc. *þeir*, acc. *þá*, etc.), it does appear that forms in *b-* did not originally supply a complete paradigm.

5.15 The usual paradigm of the anaphoric pronoun in LWS was as follows:¹

	Masc.	Neut.	Fem.	Plural
<i>Nom.</i>	<i>hē</i>	<i>hit</i>	<i>hēo</i>	<i>hī</i>
<i>Acc.</i>	<i>hine</i>	<i>hit</i>	<i>hī</i>	<i>hī</i>
<i>Gen.</i>	<i>his</i>	<i>his</i>	<i>hire</i>	<i>heora</i>
<i>Dat.</i>	<i>him</i>	<i>him</i>	<i>hire</i>	<i>him</i>

For these forms there are many phonological variants in all dialects, see further §5.17.

¹ As with the personal pronouns proper, there are no instrumental forms, but unlike them, the anaphoric pronoun has no dual forms.

5.16 It is reasonable to suppose that the paradigm presented in §5.15 is descended from a similar paradigm in the prehistory of the language, and that the inflexions which were attached to the stem were parallel to the inflexions found in the forms of the demonstrative *sē*, *hæt*, *sēo*, see §§5.4–5. Only the following inflexions, therefore, require particular mention from a Gmc point of view:

nom.sg.masc.: OE *he* derives from PGmc **hiz*, which was altered to **hez* by the vowel-lowering effect of **-z*, cf. Hogg (1992b: §3.20), which itself was then exceptionally lost after rhotacization;¹ the vowel would then be lengthened in stressed forms, see *ibid.*: §§2.80, 5.189, and §5.17(1) below;

nom.sg.neut.: this form retains the shape of the stem found in Got *ita* ‘it’, but the initial consonant of the PIE *k̑*-stems is added to the *i*-stem by a transparent analogy.²

¹ Note, however, that this exceptional behaviour is found only with the personal pronouns, e.g. *me* from **mir*, and also interrogative *hwa*, see §§5.20, 5.25, also Hogg (1992b: §4.16).

² The suggestion by Prokosch that PDE *it* might be a survivor of the original stem is surely an error.

5.17 Amongst the more important phonological variants of this pronoun, we may note the following:

- (1) The pronoun could occur in both stressed and unstressed positions. In stressed positions the vowel of the nom.sg.masc. would be lengthened by normal processes in OE, see Hogg (1992b: §2.80), and hence appear as *hē*; otherwise it would remain short, i.e. *he*. Similar variation would have occurred with the other open monosyllables, i.e., *hēo*, *hī* (all forms). Conversely, even in closed syllables, long vowels and diphthongs could be shortened when unstressed: see §5.11. It is often asserted that the diphthongal monosyllables were invariably long, but that position is difficult to maintain.
- (2) In all dialects there is variation between nom.acc.pl. *hī* (or a phonological variant thereof, see further below in this section) and *hēo*. The former, *hī*, is etymologically uter and the latter, *hēo*, neuter. But the latter also equates to the nom.sg.fem. whilst the former, in contrast,

equates to the acc.sg.fem. Thus, relevant etymological paradigms in EWS would have been:

	Masc.	Neut.	Fem.	Pl.
<i>Nom.</i>	<i>hē</i>	<i>hit</i>	<i>hēo</i>	<i>hī, hie, hēo</i>
<i>Acc.</i>	<i>hine</i>	<i>hit</i>	<i>hie</i>	<i>hī, hie, hēo</i>
<i>Nom.pl.</i>	<i>hie</i>	<i>hēo</i>	<i>hie</i>	<i>hira, heora</i>
<i>Acc.pl.</i>	<i>hie</i>	<i>hēo</i>	<i>hie</i>	<i>him</i>

Clearly, there was much opportunity for confusion, and therefore, unlike in the other cases considered in this section, the changes must have been morphologically conditioned. EWS retains the original forms of the *uter* in the plural nom.acc. i.e., *hī, hie*, see (3) below, although the original neut. *hēo* also occurs; in the singular the distinction between nom. and acc. fem. is retained. The situation is similar in LWS. In Merc, PsGl(A) has *hie* in all relevant forms, including nom.sg.fem., thus contrasting with WS, whilst in Ru1 the two types of form seem thoroughly confused.¹ In NNbr, the most frequent of the plurals is *hia* in both nom. and acc., and phonological variants thereof, but the type *hī* occurs in a minority of instances; in the fem.sg., the regular form of both nom. and acc. is *hīo*.² In SNbr the plural forms are most frequently *hiæ, hia*, but *hie* also occurs occasionally. In the fem.sg. the nom. is *hīo*, contrasting with acc. *hia, hiæ*. In Kt, Occ49 has both *hī* and *hīo* in the plural, whilst in the fem.nom.sg., *hīo* is plainly more frequent than *hī*, but forms of the fem.acc.sg. are absent.

- (3) In all forms in which LWS has medial *-ī-*, EWS has, alongside the same forms, variants with medial *-ie-*. For discussion and examples of this phenomenon, see Hogg (1992b: §§5.163ff.). Perhaps in EWS, see §6.148&n1, and certainly in Angl, *-ie* in *hie* represents not the usual EWS diphthong but a sequence of two short vowels.³ Furthermore, already in EWS (Or) there is a tendency in positions of low stress for */i/* to lax and then be represented by <y>. Hence, variants such as *hys, hym* arise alongside *his, him*. These variants are quite infrequent in the best manuscripts of Ælfric; they are much commoner in other late texts, see *ibid.*: §5.173 for examples. All these variants are found only in WS texts.
- (4) There are a small number of further variants which are of interest.⁴ Firstly, in LWS the most important of these is dat.pl. *heom* rather than *him*, which starts to appear in some Ælfrician texts and is frequent thereafter, for example in WScp. Outside LWS the variant is regular only in the Merc Ru1. Since this variation occurs independently of nom.acc.pl. *hēo*, see (2) above, it is difficult to provide a plausible explanation,⁵ except that probably the diphthong has been extended

from gen.pl. *heora*, where it is due to back umlaut. Secondly, in Nbr the apocopated fem.dat.sg. *hir* is much more frequent than unapocopated *hire*, cf. §§5.8n5, 5.12.⁶

- (5) There must also have been enclitic forms of the anaphoric pronoun in OE, but none are attested until the Middle English period because, if the view of Seebold (1984: 60) is correct, they were not regarded as literary.

¹ Except in nom.sg.fem., where only *hīo* and variants occur, but the absence of the *hie* type here may be purely accidental.

² In all Nbr texts there is much phonological variation of the diphthongal form, so that, for example, <hiu, hio, hia, hea, hiæ> are all variants of the same morphological form, see further Hogg (1992b: §5.44) for discussion of the phonological issues.

³ The point cannot be demonstrated directly because *hie* is rarely stressed in verse, but etymologically it is parallel to the present subjunctive *sie(n)* of ‘to be’ (but with original **i* rather than **ī* shortened antevocally), which is often disyllabic in verse, e.g. GenA 1827, Dan 307, And 417, Met 10.23, though never in a position in which a heavy first syllable is required. In non-Ælfrician LWS texts, the spellings *hie* and *sie*, but with <ie> in no other word, are often a sign of Anglian influence, see Fulk (2008). The fact that spellings in <ie> are so rare in Angl aside from in these two words, see Hogg (1992b: §5.169), supports the assumption that *hie*, like *sie*, is disyllabic.

⁴ In addition to the Nbr diphthongal forms remarked in n2 above, it should also be observed that both Merc and Kt have similar variations of phonological origin. Thus, in Merc we find gen.pl. *heara*, and in Kt *hiore*, *hiora*. *Hiora* also occasionally occurs with other spellings: *hiara*, *heora*, *heara*.

⁵ Perhaps the motivation was to differentiate singular and plural forms. From early examples we can cite forms in Chron(A) at 443 (1×) and 449 (3×). Note also the Kt Ch 1508.11 *beom*.

⁶ The occasional use of nom.pl. *he* in PsGl(D), alongside *hȳ*, which is noted by Campbell (1977: §703), might be connected with laxing, see Hogg (1992b: §§5.170–5). It is possible to find examples, as in PsGl(D) 70.10, where *be* and *hȳ* occur side by side.

IV Interrogative pronouns

5.18 The interrogative pronouns of Gmc also serve as indefinite pronouns meaning ‘someone’, ‘something’.¹ The interrogatives must always have been stressed, but not the indefinites, and the co-occurrence of stressed and unstressed forms has consequences for the pronoun’s development, see §5.20.

¹ This is an ancient property, since it obtains in interrogatives derived from PIE **k^wo-/k^wi-* in other languages, though often the indefinite function is marked by the addition of an affix, e.g. Lat. (*ali*)*quis* ‘someone’, *quisque* ‘whoever’, see also §5.20n1.

5.19 The usual paradigm of the interrogative pronoun in LWS was as follows:

	Uter	Neuter
<i>Nom.</i>	hwā	hwæt
<i>Acc.</i>	hwone	hwæt
<i>Gen.</i>	hwæs	hwæs
<i>Dat.</i>	hwæm	hwæm
<i>Instr.</i> ¹	—	hwȳ, hwon

Variations from this paradigm and variant forms in other dialects are discussed below in §5.20.

¹ *Hwȳ* is used alone to mean ‘why?’; *hwon* is almost never used this way, but as the object of a preposition. An exception is at HomS 19.113.

5.20 No plural forms were in use in PGmc, though plurals to the cognate root are common in other IE languages. In both interrogative and indefinite use, masculine and feminine referents are not distinguished morphologically.¹ The desinences closely resemble those of the demonstrative *sē*, see §5.4, and are of similar origin. The exception is *hwa* from **hwaz*, which shows loss of final **-z* originating in the unstressed form, see §5.16&n1. Subsequently, *hwa* was extended to stressed positions, with the result that the vowel was lengthened under conditions like those that produced lengthening in *sē*, see §5.6.² There occur variants like those found in the paradigm of demonstrative *sē*, viz. acc.sg. uter *hwane*, *hwæne*, dat. (WS) *hwām*, instr. *hwī*, *hwan*, see §5.8&n2. In Li, *hwæt* often takes the form *huæd*, sometimes also *huætd*, and similar spellings.

¹ An exception to this rule occurs when the prefix *ge-* is added to produce the meaning ‘each one’, ‘everyone’, see §5.35. Under such circumstances, in LWS there developed the form *gehwaēre*, *gehwāre* in the gen.dat.fem., on the model of the corresponding form of the demonstrative *sē*, i.e. *hāre*. In poetry, this neologism is sometimes substituted by scribes for the earlier form, often to the detriment of the metre, as at Beo 25, El 972, etc., see Sievers (1885: 485). That a similar development does not affect the unprefixing pronoun probably indicates that no particularly strong derivational connexion was perceived between the prefixed and the unprefixing forms. Got has some fem. forms in the paradigm of the interrogative/indefinite pronoun, but they may have a similar, analogical origin.

² Hollifield (1985) maintains instead that *hwā* is to be derived from **xwai*.

5.21 The remaining interrogative pronouns are all inflected like strong adjectives. These include *hwæðer*, *hweðer* ‘which of two?’,¹ *hwelc*, *hwilc* (*hwylc*) ‘which?’,² and *hulic* (or *hūlic*?) ‘of what sort?’,³ the last of which declines like adjectives in *-lic*, see §4.52.

¹ *Hwæðer* is etymologically correct, but *hwēðer* appears beside it in all dialects, doubtless as a low-stress variant in dialects with neither second fronting (see Hogg 1992b: §§5.87–92) nor Kt raising of *æ* to *e* (see *ibid.*: §5.189).

² *Hwelc̄*, reflecting **hwa-lik-*, is normal in EWS, and it is found in all dialects. The predominant LWS form, *hwilc̄* (*hwylc̄*), corresponds to Got *hi-leiks* (like Lat *quisque* alongside *quodque*), being found also in Kt in OccGl 49 and some charters, and in Merc in Ru1. In Nbr there occur also *hwoelc̄*, with rounding after *w*, see Hogg (1992b: §5.177–8), and *hwælc̄* (found also in Ru1), if the vowel represents the *i*-umlaut of *ā* introduced on the analogy of *hwā* (so Campbell 1977: §197), otherwise *hwælc̄*, probably with *æ* representing a rounded vowel, see *ibid.*: §5.179.

³ EWS *bulucu* and Nbr *buluco* are to be explained as showing back umlaut of *i* under medium stress, with subsequent monophthongization, see Hogg (1992b: §6.11). Nbr *huliġ* shows lenition of final *c̄* under low stress, see *ibid.*: §7.52.

V Personal pronouns

5.22 OE had a full set of first- and second-person pronouns, *iċ* ‘I’ and *þū* ‘you (sg.)’, which, unlike most other OE pronouns, show no gender marking. Unlike in many IE languages, there is no distinction in the second-person pronouns between formal and familiar forms of address: the distinction between *þū* and *ġē* ‘you (pl.)’ is solely one of number.

5.23 The usual paradigm of the first-person pronoun in LWS was as follows:

	Singular	Dual	Plural
<i>Nom.</i>	<i>iċ</i> ¹	<i>wit</i>	<i>wē</i>
<i>Acc.</i>	<i>mē</i>	<i>unc</i>	<i>ūs</i>
<i>Gen.</i>	<i>mīn</i>	<i>uncer</i>	<i>ūr</i>
<i>Dat.</i>	<i>mē</i>	<i>unc</i>	<i>ūs</i>

However, *mē* and *wē*, i.e. monosyllables with a final vowel, must have had variants with short vowels in unstressed positions, just as with demonstrative *sē*, see §5.7; and indeed, the short vowels are more original. Dual forms are rare in Angl, where they are attested only in Ru1 and RuneRuthwellA. Departures from this paradigm and variant forms in other dialects are discussed below in §§5.26–8.

¹ A negated form, *niċ(c̄)*, is used as a response ‘no’.

5.24 Germanic inherited from PIE a suppletive system of first-person pronouns in which the nominative stem differed from the stem of the oblique cases. The late PGmc paradigm out of which the OE forms developed appears to have been approximately as follows:

	Singular	Dual	Plural
Nom.	*ik	*witu	*wīz
Acc.	*mek	*unk	*uns
Gen.	*mīnō	*unkerō	*unserō
Dat.	*miz	*unk	*uns

5.25 Of the forms cited in §5.24, the following present issues of difficulty or interest:

nom.sg.: *ik must have been the unstressed form, with analogical introduction of its vowel into the stressed form, with only ON *ek* showing retention of the original stressed vowel amongst the Gmc languages (cf. Lat *egō*).

acc.sg.: *mek is the stressed form; all the other Gmc languages show generalization of unstressed *mik. The root is *me-, with the addition of *-k borrowed from the nom.¹ The form *mē* could be due to loss of *-k when *mek was extended to unstressed positions, with lengthening of the final vowel when it was re-stressed, see *ibid.*: §2.80. More likely it represents replacement of the acc. by the dat., see §5.26, as happened widely in Gmc and IE, see Seebold (1984: 32–3, 35–6).

gen.sg.: To the root *me- was added the adj. suffix *-īn- (cf. *stānen* ‘made of stone’ < *stain-īn-a-z, §4.44(b)), presumably producing *mein- > *mīn-, see Hogg (1992b: §3.3). To this was added an adj. ending, perhaps nom.acc.pl.neut. *-ō, as assumed here.

dat.sg.: Unstressed *miz developed in the same way as *hiz, see §5.16&n1.

nom.du.: *wi- reflects an unstressed form of the same root found in the nom.pl.; *tu is perhaps an unstressed form of the root that appears in PGmc as *tw- ‘two’; but Seebold (1984: 25–6) instead reconstructs *wi-de, with *-de regarded as cognate with the alternative form of ‘two’ reflected in Hittite *ta*.

acc.du.: To the root *un-, found also in the plural, is added *-k-, probably drawn from the acc.sg.

gen.du.: To the stem *un-k- is added, probably, an adj. suffix, as in the sg., but this time of the form *-er-, as in *ōder* ‘other’. The ending is as in the gen.sg.

nom.pl.: To the stem *wī- (from PIE *we-i, *ibid.*: §3.3) is added a Gmc masc.pl. noun suffix -s. In the unstressed form of the word, *ī* is shortened, and *wiz (showing the effect of Verner’s Law, §§4.4–5) then develops like *hiz, §5.16&n1. Seebold (1984: 27–30) instead reconstructs PIE *we-s parallel to *we-i, the former with a nominal ending, the latter a pronominal.

acc.pl.: To the root *un- found also in the dual is added *-s-, probably from the same source as in the nom.pl.

gen.pl.: The form *ūre* has no parallel in Gmc and is difficult to explain as derived from **unserō* (formed like gen.du. **unkerō*) by phonological processes pertaining to stressed syllables. The stem **ūser-* (from **unser-*, see *ibid.*: §3.14) was used as an adj., and perhaps in an inflected, unstressed form of the adj. *e* was syncopated and *z* (from *s*, see *ibid.*: §4.15) assimilated to the following *r*.

¹ But an earlier origin in PIE is not unlikely: see Seebold (1984: 34–5), and cf. Shields (2001a).

5.26 The chief morphological variation in the paradigm is that the Anglian dialects and poetry evince acc. forms with a different ending, i.e. sg. *meċ*, du. *uncet* or *uncit*, pl. *ūsiċ*, though in Merc *me* and *ūs* also occur as acc. forms. Of these, *meċ* agrees with the Gmc cognates except as regards the vowel, see §5.25. As remarked there, acc. *mē* is probably analogous to the dat., see Ross (1933). As regards acc.pl. *ūsiċ*, this is paralleled by OHG *unsih*, to be derived from **uns-ik*. The desinence **-ik* is no doubt borrowed from the stressed acc.sg. **mik*.¹ Possibly acc.du. *uncit*, *uncet* developed from **unk-et*, in which the desinence could be derived from a stressed nom.pl. **wet*,² but perhaps more likely the form is dissimilated from **unk-ik*, parallel to the corresponding plurals in both the first- and the second-person pronouns.³ The form *uncit* has no precise parallel in a related language.⁴ In verse, the metre sometimes reveals that a WS monosyllabic form has been substituted for an Angl or poetic disyllabic acc. form in *-ċ* or *-t*, see Fulk (1992: §355(7)).

¹ The lack of *i*-umlaut in *ūsiċ* is most likely due to restoration by analogy to *ūs*, see Hogg (1992b: §5.85.10(a)), and cf. the following note.

² So Campbell (1977: §703n1), cf. Howe (1996: 134–5). The basis for Campbell's analysis is the lack of *i*-umlaut in *uncit*. However, the assumption of analogical restoration of the unumlauted vowel is necessary in regard to *ūsiċ* because OHG *unsih* demands reconstruction of a form ending in **-ik*, and analogy is therefore hardly unlikely in regard to *uncit*. This conclusion removes a possible objection to the analysis of Shields (2001b), who sees in this form the reflex of a PIE non-singular dental suffix.

³ Such is the analysis of Stiles (1996).

⁴ Note, however, that the Got and ON cognates reflect a form with **-is* added to the stem, perhaps by analogy to dat.sg. **mis* (so Prokosch 1939: 283); but perhaps more likely **-is* is older than that and is based on PGmc nom.pl. **we-i-s* before *ei* developed to a diphthong and was monophthongized to *ī*, see Hogg (1992b: §3.3).

5.27 In Merc, for gen.pl. *ūre* PsGl(A) has only *ūr*, which also occurs in the *Royal Glosses* (OccGl 54) 3× beside *ūre* and adjectival forms. In Nbr, the corresponding forms are *ūser* and *ūsra*. Endless Merc *ūr* is less likely to be due to apocope than to morphological reanalysis on the basis of the related adjective. That is, *ūr* is ultimately abstracted from inflected *ūres*, *ūrne*, etc. Certainly, Nbr *ūsra* is adjectival in origin.¹ Nbr *ūser* may also

be adjectival in origin, since it perhaps is not the etymologically correct reflex of stressed PGmc **unserō*, see §5.25.²

¹ Indeed, since the Angl sources are glosses rather than independent prose, the distinction between pronoun and adjective on the basis of syntax may not always be reliable.

² If non-high vowel syncope operated the same way as high vowel syncope with respect to final *-u*, we should expect **ūsero* for the pronoun, see §3.64ff. But the data pertaining to this question are too limited to afford a determination. Possibly, though, stressed **ūserō*, if extended to unstressed positions, would have behaved differently as regards syncope and apocope.

5.28 Some normal phonological and orthographic variants occur in INbr. Due to the change of final [k] to [x] under low stress, see Hogg (1992b: §§7.52–3), pronouns ending in *ċ* after a vowel (*iċ*, *ūsiċ*) may be spelt with final <h, ch, g>. The vowel in *wē* may be spelt <oe>, of which <æ> MkGl(Li) 4.35 may be considered a variant, see *ibid.*: §§5.77n1, 5.179. This represents an actual sound change, rounding after *w*, see *ibid.*: §5.177. But possibly <æ> is an alternative spelling of *ē*: cf. <gæ> MkGl(Li) 14.42 beside <ge, gee>, etc.

5.29 The usual paradigm of the second-person pronoun in LWS was as follows:

	Singular	Dual	Plural
<i>Nom.</i>	þū	ġit	ġē
<i>Acc.</i>	þē	inċ	ēow
<i>Gen.</i>	þīn	inċer	ēower
<i>Dat.</i>	þē	inċ	ēow

However, *þū*, *þē* and *ġē*, i.e. monosyllables with a final vowel, must have had variants with short vowels in unstressed positions, just as with *sē*, §5.6. Departures from this paradigm and variant forms in other dialects are discussed below in §5.32.

5.30 The late PGmc paradigm out of which the OE forms developed appears to have been approximately as follows:

	Singular	Dual	Plural
<i>Nom.</i>	*þu	*jutu	*jūz
<i>Acc.</i>	*þek	*ink	*izwiz
<i>Gen.</i>	*þīnō	*inkerō	*iuwerō
<i>Dat.</i>	*þiz	*ink	*izwiz

Unlike in the first-person pronouns, the nominative and oblique forms do not appear to derive from different stems. The antecedent acc.sg. form PIE

**twe* is the result of the addition of *-*e* to nom. **tu*, and the resultant PGmc **þwe* lost its *w* under low stress in the oblique cases at a very early date, with subsequent addition of *-*k* as with first-person **mek*. The oblique cases of the dual are analogical in origin, see §5.31.

5.31 The relation between most of the LWS forms cited in §5.29 and the PGmc ones cited in §5.30 is transparently parallel to the corresponding relation in the first-person pronouns; see §5.25 for details of their development. Of the forms cited in §5.30, the following merit special comment:

nom.du.: The vowel *u* was replaced by *i* in both North and West Gmc under the combined influence of first-person nom.du. **witu* and the vocalism of the oblique cases.

acc.du.: All the oblique cases in the dual are Gmc innovations, as they do not resemble forms in other IE languages. The analogical model is obviously the oblique cases of the paradigm of the first person dual pronouns, and the *i*-vocalism in West Gmc is most likely supplied on the basis of the plural.

nom.pl.: OE *ġē* reflects a form **ji̯z* altered from **ju̯z* by analogy to NWGmc first person nom.pl. **wiz* > OE *we*, with subsequent lengthening under stress.

acc.&dat.pl.: The form of the oblique stem in PGmc is uncertain, but plainly **iu-* underlies the WGmc forms, see Flasdieck (1933). According to Seebold (1984: 41–2), **izwiz* > **izwez* co-occurred with **izwaz* > **ezwaz* in WGmc, and *-*zw-* was assimilated to *-*ww-*. The bare stem **iu* would normally develop to LWS **ēo*; the final *w* in the actual LWS form *ēow* was supplied by analogy to the genitive.

gen.pl.: **iuwerō* is formed the same way as the corresponding first-person pronoun (**unserō*), i.e. **iu* + *erō*, with the glide *w* inserted to fill the hiatus between the vowels, see Petersen (1930: 183).

5.32 As with the first-person pronouns, the Anglian dialects and, in part, poetry add a marker of the accusative: acc.sg. *þec*,¹ acc.du. *incit*,² acc.pl. *ēowic*,³ see §5.26. Predictable alternative spellings with <h, ch> for final *ċ* occur, see §5.28. Nbr acc.pl. *īuih* is extended to the dat. In DurRitGl and Li it has almost entirely supplanted the earlier dat.,⁴ but in the latter the dat. form is redifferentiated by the change of *-ih* to *-uh* or *-h*. In Ru2, *īow* is likewise extended to the accusative, so that the two forms are used indifferently for both cases. Also in Nbr, nom.pl. *ġie* (beside *ġē*, etc.) probably shows raising under low stress, see Hogg (1992b: §5.54).

¹ Alongside nearly as frequent *ðē* in PsGl(A).

² Although in the corresponding first-person pronoun we find *uncet* alongside *uncit*, there does not occur **incet*, presumably because <c> was palatal in the latter but not

in the former. Cf. the co-occurrence of *-lic-* and *-lic-/lec-* in adjectives, Hogg (1992b: §7.41).

³ Once *ēow* in PsGl(A) 33.12.

⁴ Li has also MtGl 26.41 *īow* and LkGl 22.10 *īw*, both dat.

VI Indefinite pronouns

5.33 The pronoun *man*, *mon* ‘one’ is used the way French *on* (from Lat *homo*) and German *man* are used, to form the semantic equivalent of a PDE passive construction. The word is undeclined, but it is masc., being derived from masc. *man(n)* ‘person’, and it is used with both sg. and pl. verbs. Also indeclinable is WS *fela*, Angl *feolu*, *feolo*, on the derivation of which see §2.3n4.¹

¹ On WS *feala*, see Hogg (1992b: §5.42n1); on WS and Kt *feola*, *ibid.*: §5.105.4&n1; on PsGl(A) *fiolu*, *ibid.*: §5.158.

5.34 The indefinite pronouns *hwā* ‘someone’, ‘anyone’, *hwelc*, *hwilc* (*hwylc*) ‘anyone’, and *hwæþer*, *hweþer* ‘either (of two)’ are inflected in the same way as the corresponding interrogative pronouns, with which they share their derivation and variant forms, see §§5.18–21. Adding the prefix *ā-* ensures that the same pronouns will be recognized as indefinite rather than interrogative, i.e. *āhwa*, *āhwilc*, *āhwæðer*, the last of which may be contracted to *āwðer*, *āðer*, *ōwþer*, with corresponding negative forms *nāhwæðer*, *nā(w)ðer*, *nō(w)ðer*. The same effect is achieved by prefixation of *nāt-*, i.e. *nāthwa* ‘someone’, ‘anyone’ and *nāthwelc* ‘something’, ‘anything’.¹ Rare *sambwelc* has the same meaning.² Fem. or neut. *wiht*, *wuht* ‘something’, ‘anything’ is declined as an *i*-stem, see §§2.63–5.³ As a pronoun its meaning is unchanged by the prefix *ā-*, *ō-*,⁴ whilst *nā-* or *nō-* negativizes it.⁵ A compound of *wuht*, *wiht* with *nān-* also occurs, *nānwuht*, *nānuht* ‘nothing’. The form of this found in Li and Ru2 is *nāniht*, to which there also exists a positive form *æniht* ‘something’, ‘anything’.

¹ The prefix *nāt-* is a reduction of *ic nāt* ‘I do not know’. Indeed, at Beo 274, *ic nāt hwilc* appears to have been substituted for the pronoun by a copyist, since the phrase complicates the metre, see Bliss (1967: §79).

² As a pronoun, rather than an adj., it occurs only at LawIne 23.3. The prefix is doubtless related to the conj. *sam* ‘whether’, ‘or’.

³ On the interchange between *wiht* and *wuht*, see Hogg (1992b: §6.8). The former is chiefly Anglian and poetic, for the most part foreign to Alfredian and Ælfrician WS.

⁴ But on a certain restriction on adverbial usage, see Fulk, Bjork and Niles (2009: 245 note on 2432ff.).

⁵ To *āwihht*, *āwuht*, *ōwihht*, *nāwihht*, *nāwuht*, *nōwihht*, *nōwuht* there correspond also contracted forms, *(n)āuht*, *(n)āht*, *ōuht*, *(n)ōht*, see Hogg (1992b: §6.71n2). Neut. *āwihhtes* is reduced even further in the adv. *(n)āteshwōn* ‘(not) at all’.

5.35 When *ge-* is prefixed to the simple indefinites, they acquire a generalized meaning, *gehwa* ‘everyone’, *ghwelc*, *ghwylc* (*ghwylc*) ‘each’, *ghwæper*, *ghweðer* ‘each (of two)’. The same generalized meaning is more often achieved by use of the prefix *æg-* (derived from **ā-gi-*), i.e. *æghwa*, *æghwelc*, *æghwæper*.¹ Some generalized indefinites are formed by the addition of (*ge*)*wel-*, i.e. non-Ælfrician *gewelhwilc* ‘everyone’ and poetic *welhwā* ‘everyone’.

¹ See also §5.37n1 on the reduced form *ælċ*. Possibly *æt-* was used to form a generalized indefinite *æthwā* ‘everyone’, but the word occurs just twice (Pan 15, LawEpisc 10), and so it may be that *æt-* is an error for *æg-*. In Angl the form is usually *ēg-* (Li has *æg-* rarely), alongside *ō(ē)g-*, both from **ō-gi-*, see §5.37n1.

5.36 In the indefinite pronouns *hwæthwugu* ‘something’ and *hwilchwugu* ‘someone’, it is the first constituent that is inflected, i.e. as forms of *hwæt* and *hwilc*.¹ The second constituent also takes the form *-hugu* and, in EWS, pl. *-hwuguningas*, *-hwugununges*, *-hweg(a)nunges*, *-hweguningeas*; the alternative forms *-hwegu*, *-hwigu*, *-hwyga*, etc., occur in non-Ælfrician texts, including early and Anglian ones, such as the early glossaries (EpGl *-huuoegu*, CorpGl *-huegu*).² In NNbr the deuterotherme most commonly takes the form *-huoegu*, with rounding after *w* (see Hogg 1992b: §§5.177–8), but there it is also once inflected, in *huoelchwoeges* ‘of someone’ LkGl (Li) 20.28, whilst the prototheme never is.³ In Ru2, *aliquis* is usually glossed *hwelchwøegu* and *aliquid* usually *hwelchwøegnu*. Li also has a rare indeclinable pronoun *hu(o)elchwoene* ‘some(one)’.

¹ In most editions these are printed as one word, and the handbooks analyse them so. But it is peculiar to find inflexional preceding derivational morphemes, and so it might be better to regard *hwugu* as a separate word. Compounds with inflected first constituents may have been in existence in the tenth century, but not in the older language, see §3.144.

² The etymology is obscure: see Horn (1921: 82).

³ To WS *hwæthwugu* corresponds Li *huothuoegu*, *huodhuoegu* (for *t > d*, cf. §5.20), the unusual rounding in the prototheme probably indicating greater stress on the deuterotherme.

5.37 Many indefinite pronouns are substantivized adjectives, and thus they are inflected like indefinite adjectives. Other than the ones treated in §§5.34–5, those given indefinite inflexions include *ælċ* ‘each’,¹ *æniġ* ‘any’, *eall* ‘all’, *næniġ* ‘none’,² *nān* ‘none’,³ *nānþing* ‘nothing’, *sum* ‘a certain person’, *swelc*, *swilc* (*swylc*) ‘such’,⁴ and *þyslic*, *þuslic* ‘such’.⁵ Declined with definite inflexions are *se ilca* ‘the same’ and *se sylfa* ‘the same’, though *sylf* may also be declined indefinite without the demonstrative.

¹ A reduction of *æghwylc*, from *ā* ‘always’ + **gi-hwylc*, see §5.35. The form in PsGl(A) is *ylc* (or *ylc?*), once *ōēlc* from **ō-gi-hwylc*. Ru2 has *ēlc*, comparable to Angl *ēghuelc*, see §5.35n1. But *ælċ* is usual in other Nbr texts.

² *Næniġ* is almost entirely missing from Alfredian and Ælfrician WS.

³ Derived from *ne + ān* ‘one’, hence acc.sg.masc. *nænne* beside *nānne*, see §4.81.

⁴ The distribution of *swelc* and *swilc* is very similar to that of *hwelc* and *hwilc* (see §5.21n2), by which it was plainly influenced, since *swilc* is unetymological, being formed by analogy to *hwilc*. This was an early development, attested already in the *Corpus Glossary* (CorpGl).

⁵ Alternative forms are *þylliċ*, *þulliċ*, see Hogg (1992b: §7.91(2)). There also occurs *þylc*, see *ibid.*: §6.68n1. The co-occurrence of forms with and without *i*-umlaut is attributable to the same causes discussed in *ibid.*: §5.85(10)a.

VII Other pronominal types

5.38 In OE the relative function is expressed chiefly by the demonstrative *sē*, or by the relative particle *þe*,¹ or by a combination of the two, see Mitchell (1985: §§2103–415). The particle may also be used in conjunction with an anaphoric pronoun expressing the intended case of the particle within the relative clause, e.g. *þe his* ‘whose’ and *ðe hine* ‘whom’. Alternatively, relative clauses may begin with *swelc*, *swilc* (*swylc*).² Of a generalized relative meaning are *swilc* ‘whichever’ and *swæþer* (*swā*) ‘whichever (of two)’ when these are contracted from *swā hwilc* and *swā hwæþer* (*swā*), and they are inflected like *hwilc* and *hwæþer*. The same meaning is achieved in LWS by the addition of *lōc-* (beside the unreduced imperative *lōca* ‘look’) to form *lōchwa* ‘whoever’, *lōchwilc* ‘whichever’ and *lōchwæðer* ‘whichever (of two)’.³ Whether or not *swā* could function as a relative particle is debated.⁴

¹ Proto-WGmc had no relative pronoun, and the relative function was assumed chiefly by a relative particle reflecting the PIE stem **to-* that underlies the paradigm of demonstrative *se*.

² On the inflexion of *swelc*, *swilc*, see §5.36n4.

³ The editions often print *lōc* as a separate word or, conversely, *lōca-* as a prefix.

⁴ See Mitchell (1985: §§2379–82), Schleburg (2002: 55–60). It would hardly be surprising if *swā* were occasionally treated as a relative particle, given the function of *swā...swā* in converting anaphoric and indefinite pronouns to ‘generalizing’ relative pronouns, i.e. ones that incorporate an indefinite antecedent to the relative function, e.g. *swā hwæt swā* ‘whatever’, *swā hwilc swā* ‘whoever’ and *swā hwæþer swā* ‘whichever (of two)’. Likely examples are Jud 123 and Beo 2608, in the latter of which perhaps *ġehwilc swā* is functionally equivalent to *swā hwilc swā*, see Fulk, Bjork and Niles (2009: 252).

5.39 Although Germanic inherited a reflexive pronoun (e.g. ON acc. *sik*, dat. *sér*, gen. *sín*), no trace of it is to be found in OE, where anaphoric and personal pronouns are instead used to express reflexive relations. Only the related rare and chiefly poetic reflexive adj. *sīn* is preserved. On the reflexive pronoun in Gmc, see Seebold (1984: 57–8).

Verbs

I Early background

6.1 In Greek and Sanskrit, the verb system is morphologically complex, with three voices (active, middle, passive), four or five moods (indicative, subjunctive, optative, imperative; also injunctive in Sanskrit), and seven aspects/tenses (present, imperfect, future, aorist, perfect, pluperfect; also conditional in Sanskrit, future perfect in Greek) inflected for three numbers (singular, dual, plural) and three persons. Comparative evidence suggests that most of this complexity was present in the IE protolanguage from which the Gmc languages evolved.¹ Yet even in the most conservative of the older Germanic languages, Gothic, the majority of these categorial distinctions have disappeared, and the other Germanic languages show even further reduction of the distinctions. For the most part, then, with relatively isolated exceptions, the development of the verb system of Old English is most profitably elucidated by comparison to the systems of other WGmc languages rather than any reconstructed PGmc system, which must remain relatively speculative, given the remarkable differences between Gothic and the other Gmc languages in this regard.²

¹ See Szemerényi (1996: §9.1) and, for an alternative view, Drinka (2003) and Shields (2004), with references.

² On Gmc verb morphology, see Fullerton (1977) and Bammesberger (1986b).

6.2 In Gmc, the great variety of categories of inflexion that had characterized PIE verbs was sharply reduced to a conjugational system comprising, for most finite verbs, two tenses (present and preterite) and three moods (indicative, subjunctive,¹ imperative, the last without tense differentiation). The aspectual distinctions of PIE were abandoned.² Alone amongst the Gmc languages, Gothic preserves a number of dual verb inflexions; the

other Gmc languages distinguish only singular and plural in verbs. As in the other NSGmc languages, one form serves for all persons in the plural of all tenses and moods;³ as in OFris (but not OSax), one form serves for all persons of the singular in the subjunctive, both present and preterite. Gothic preserves a fully inflected category of passive verbs inherited from the IE protolanguage, though this category was lost in the other Gmc languages. In OE, the sole remnant of this synthetic passive is *hätte* ‘is called’, pl. *hätton*, corresponding to the Got passives *hätada*, pl. *hätanda*. Although the category of future tense was not expressed in the inflexional morphology of Gmc, in WGmc different stems could be used to distinguish present and future (and other) functions of the verb ‘to be’, see §6.146. In addition to these finite forms, there was: an infinitive used chiefly with auxiliary verbs,⁴ e.g. *faran* ‘to go’; an inflected infinitive or ‘gerund’ used chiefly with nouns, adjectives and forms of ‘to be’ to express necessity, futurity or purpose, e.g. *to faranne*; a present participle, e.g. *farende* ‘going’; and a past or passive participle, e.g. *faren* ‘gone’,⁵ the last two inflected as adjectives, see §§4.32, 4.53–6.⁶

¹ The Gmc subjunctive corresponds formally to the PIE optative rather than to the PIE subjunctive, and hence in many handbooks it is called an optative.

² On these developments, see Hewson (1997, 2001).

³ Note that Li *wutum* ‘let us’ appears to reflect a 1pl. form, as opposed to *wuton*, *uton* used elsewhere, seemingly reflecting a 3pl. form.

⁴ E.g. *mæg faran* ‘can go’. ‘Auxiliary’ refers to a syntactic rather than a morphological property, and so auxiliary verbs are not discussed as a discrete category in this grammar. On the OE auxiliaries *bēon/wesan*, *dōn*, *habban*, *weorðan*, etc., and the modal auxiliaries *āh*, *can*, *mæg*, etc., see Mitchell (1985: §§651–80, 990–1024).

⁵ The participle is passive if the verb is transitive, active if intransitive, see Mitchell (1985: §§23–4). As remarked above in §4.1n3, in this work ‘past participle’ refers indiscriminately to past and passive participles, i.e. to second participles.

⁶ For a synchronic model of the logical structure of OE verb morphology, see J.M. Anderson (1998).

6.3 A peculiarity of the IE protolanguage is that present-tense verb stems were for the most part not basic but derived. Although some verb roots formed the present stem without embellishment, many added an affix to distinguish the present from other categories, perhaps originally indicating durative, iterative, or some other verbal aspect rather than present tense. Most of these processes of stem formation ceased to be productive in Gmc, though stems in PIE **-yo-* played an important role in the Gmc verb system, see §6.78. Otherwise, OE preserves only relics of PIE present-stem suffixes. Thus, we find PIE **-sk-* reflected in OE *wȳsċan* < PGmc **wun-sk-j-an-* ‘wish’, *þerscan* ‘thresh’ and a few other verbs. Reduplication in the present stem has been extended to the preterite in *bifian* ‘tremble’, originally PGmc. **bī-bē-n-*.¹ A present-tense *n*-infix is preserved in *standan* ‘stand’, missing

in the pret. *stōd*; otherwise, the original *n*-infix has been generalized outside the present system, e.g. *windan* ‘wind’, *fōn* < **fa-n-x-anan*. But already in PIE, metanalysis of the *n*-infix resulted in the rise of certain *n*-suffixes, reflected e.g. in OE *irnan* < **ri-nw-anan*, one of which came to be productive in Gmc, giving rise to the fourth class of weak verbs in East and North Germanic, though the category of verbs with *n*-suffix in WGmc leaves only relics like OE *wæcnan* ‘awake’ (pret. *wōc*) and weak *hæftnian* ‘take prisoner’.

¹ Perhaps also *cwician* ‘animate’, see Bammesberger (1986a); cf. Heidermanns (1986: 305–6).

6.4 PIE verb stems were like noun stems insofar as they could be thematic or athematic, see §2.1. In the thematic verbs the inflexions were added to a stem ending in the theme vowel **-o/e-*, whilst in the athematic verbs the endings were added to the bare root or stem. The endings were the same in the two types, except that whereas athematic verbs took the ending **-mi* in the pres.1sg. (cf. Grk *ἵστημι* ‘I stand’), the thematic verbs took **-ō* (cf. Grk *λείπω* ‘I leave’). A few relic formations in OE show traces of the old athematic class, e.g. Angl *dōm* ‘I do’ (cf. WS *dō*), but the majority of OE verbs reflect thematic formations, and original athematic formations are discernible only in a few seemingly irregular verbs, see §§6.145ff. Just as in nouns, see §2.1, the theme vowel in late PIE was in the process of becoming fused with the inflexion, and this process accelerated in Gmc, so that, for example, the PIE pres. indicative endings 2sg. **-e-s(i)*, 3sg. **-e-t(i)*, 3pl. **-o-nt(i)* developed into unitary inflexions **-is*, **-iþ*, **-anþ* in PGmc, no longer analysable as theme vowel + inflexion.¹ The change in the nature of conjugational inflexion, however, had fewer consequences than the corresponding change in declensional inflexion.

¹ Alternatively, Howren (1967) offers a synchronic account of EWS weak verbs as comprising base + theme + derivational suffix + inflexional suffix, thereby fairly approximating the conjugational structures of PIE in EWS. This allows him to identify, for example, *-þ* as the sole form of the pres.ind.3sg. inflexion, rather than as one of a group of 3sg. inflexions including *-eþ* in light-stemmed verbs of the first weak class and *-aþ* in verbs of the second weak class. This requires, however, a high degree of abstractness in underlying forms, and at all events the distinction between theme and derivational suffix is implausible because the two are in complementary distribution. Rather, Kastovsky (1996a: 37–9; 1996b: 279) is surely right that segmentations like *trymm-an*, *luf-ian* are required in a synchronic analysis.

6.5 In PIE, the different tenses were characterized in part by different ablaut grades of the verb root, in part by suffixation and/or prefixation, and in the perfect by a different set of inflexions. In Gmc, verbs inherited from PIE continued to exhibit these characteristics, though with important

modifications, and some new verbs came to be conjugated like these on the basis of analogy, e.g. *scrīfan* ‘prescribe’, borrowed from Lat *scribere* ‘write’ and conjugated according to the first class of strong verbs.¹ But the vast majority of new verbs adopted a different method of tense-formation, whereby the present and preterite stems were distinguished only by marking the preterite by the addition of a dental suffix, generally *-ð-, but also *-t- and *-þ-, see firstly §6.79. The two types of preterite-formation thus distinguish two broad types of verbs in the Gmc languages, the ablauting sort generally referred to as strong verbs, the type with dental preterite as weak verbs. The two broad types are further classifiable as comprising various subtypes, but the distinctions amongst the subtypes for the most part have their basis in Gmc phonological developments rather than differences observable in PIE. In OE, a few verbs could undergo change of class within the broad category of strong verbs, see, inter alia, §§6.45, 6.53, but aside from the few examples cited in n1, new strong verbs were not created, so that the category of strong verbs had become, effectively, a closed class. Rather, quite a few strong verbs already in OE show a tendency to be remade as weak verbs.² Amongst the 100 commonest verbs in OE (see §2.7), disregarding prefixes, 39 are generally inflected as strong verbs (4 in class 1; 3 in class 2; 8 in class 3; 3 in class 4; 7 in class 5; 7 in class 6; 7 in class 7), 48 as weak verbs (33 in class I; 12 in class II; 3 in class III; but *wunian* in class II is probably in origin of class III, see §6.130), 8 as so-called preterite-present verbs (see §§6.131–44), and all four athematic verbs appear amongst the 100 commonest (§§6.145–63), plus the verb (*w*)*uton* ‘let us’ (§6.46n1). On the general restructuring of the verb system in Pre-OE and in the transition to Middle English, see Kastovsky (1996a).

¹ This is the usual assumption, though Orel (2003: 344) doubts that the word was borrowed from Latin. Mailhammer (2006) argues that a great many of the preserved Gmc strong verbs have been assimilated to the PIE ablaut pattern from substrate formations of a different nature. Other verbs that developed strong forms are the originally weak *rīnan* < *rīgnan* ‘rain’ (pret. *rān*), *swīðan* ‘strengthen’ (pret. *swāð*); but not **forswītan* ‘exhaust’, as Ch 1519 (Whitelock 34) 44 <forswat> is an error for *forspac*: see the *DOE*: *for-sprecan*.

² Krygier (1994: 59–65, 246) reports that of the 367 strong verbs he found attested in OE, 61 of them display parallel weak forms ‘more or less consistently’, and nearly a quarter of the 367 are not attested after the OE period.

II Strong verbs

1 Inflexions

6.6 The paradigm in EWS of a typical strong verb, *bīdan* ‘await’, may be represented as follows:

Present	Indicative	Subjunctive	Imperative
Sg. 1	bīde	bīde	
2	bīst	bīde	bīd
3	bītt	bīde	
Pl.	bīdað	bīden	bīdað
Preterite			
Sg. 1	bād	bide	
2	bide	bide	
3	bād	bide	
Pl.	bidon	biden	
Infinitive	bīdan		
Infl.inf.	to bīdanne ¹		
Pres.part.	bīdende		
Pa.part.	biden		

In LWS there is also an adhortative inflexion *-an* (*-on*, *-en*) functionally equivalent to a first person imperative plural, hence *bīdan* ‘let us await’. Possibly this is cognate with the Got 1pl.imper. ending *-am*: cf. Li, Ru2 *wutum* (3×) beside *wutun*, etc., and see §6.46n1. In LWS there is such confusion of *-an*, *-on*, *-en* as inflexions in general that the ending could be in origin a subjunctive one, see Hogg (1992b: §§6.59ff.); but the combinative back umlaut in (*w*)*utan*, *-on* ‘let us’, on which see §6.46n1, along with the cognate form OSax *wita*, suggests otherwise.² In addition to the alternative forms discussed in §§6.11ff., the inflexions in the paradigm above may show normal phonological variation, e.g. final degemination and degemination between unstressed vowels (ibid.: §§7.80–1).

¹ Cosijn (1886: §70) reports that *-anne* is much more frequent than *-enne* in the EWS inflected infinitive, by a proportion of more than 4 : 1, and that the variants *-an*, *-ane*, *-onne*, *-ene* occur. PsGl(A) has only *-enne*, but back mutation points to earlier *-anne* in 58.15 to *eotenne*. In other texts there is widespread mixture of forms.

² This back umlaut poses an obstacle to equating *-un* with Got *-am*, since there are no confirmable instances of combinative back umlaut before *a*, only before *u*, see Hogg (1992b: §5.109). But the particularly low stress on this word (on which see §6.46n1) may have created exceptional phonological conditions, as suggested by OSax *wita*.

6.7 A regular exception to the inflexions laid out in §6.6 is that when a pronoun of the first or second person immediately follows a verb in the plural of any tense or mood, the inflexion is commonly reduced to *-e*, thus pres.ind. *bīde wē* ‘we await’, pret.subj. *bīde gē* ‘you await’, adhortative *bīde wit* ‘let us two await’. There may be a phonological basis for this reduction or replacement,¹ though perhaps the functional redundancy of the inflexion when a pronoun followed contributed to the change.² In contracted verbs and verbs with vocalic stems, see §§6.38–41, 6.145–63,

the *-e* is contracted with the stem-final vowel, with lengthening where possible, thus *fō wē* ‘we take’, *gā gē* ‘you go’. Use of the inflexion *-e* before a plural pronoun of the first or second person is much more regular in WS than in Angl, where a variety of endings are found, including *-að*, *-as*, *-on*, *-o*, *-a*, *-e*. Nbr forms commonly lack final *-n* in the subj., or use instead ind. inflexions, see e.g. Kolbe (1912: §§211, 213).

¹ See Hogg (1992b: §§7.100, 7.85); also Walde (1900: 125n), Luick (1922: 193–7).

² See Horn (1921: §18), but cf. Luick (1922: 193–203; 1924: 241–3).

6.8 The forms exemplified in §6.6 may be supposed to have developed from an early WGmc paradigm of the following type:

Present	Indicative	Subjunctive	Imperative
Sg. 1	*bīdō	*bīdæ ¹	
2	*bīdis	*bīdæz	*bīd
3	*bīdiþ	*bīdæ	
Pl. 3	*bīdanþ	*bīdæn ²	*bīdanþ
Preterite			
Sg. 1	*baid	*bīdī ³	
2	*bīdī ⁴	*bīdīz	
3	*baid	*bīdī ³	
Pl. 3	*bīdun	*bīdīn	
Infinitive	*bīdanā ⁵		
Infl.inf.	*tō bīdannjæ ⁶		
Pres.part.	*bīdandī		
Pa.part.	*bīdana		

In IGmc, distinct inflexions for the three persons of the pl., both pres. and pret., ind. and subj., were maintained, as in Gothic and NGmc, whilst in NSGmc the 3pl. ending came to serve for all three persons of the pl. in all tenses and moods, see §6.2. In the subj. sg., the second person remained discrete in OSax and OHG, whilst in OE and OFris there was syncretism of the three persons of the sg. To these WGmc inflexions may be compared the endings reconstructed for PGmc and PIE by Bammesberger (1986b: 105–7, 29–30).

¹ Formed by analogy to the 3sg.: see Bammesberger (1981), Benediktsson (1987: 307–8). For an excellent overview of the morphology of the subjunctive, see Benediktsson (1983).

² On the derivation of the inflexion, see Bammesberger (1981).

³ The ending **-ī* should have been shortened and lost after heavy stems; its retention (and lowering to *-e*) in forms like OE *bunde* ‘bound’ pret.subj.1&3sg. is analogical, see Fulk (1992: 424–5), with references.

⁴ In East and North Gmc the stem of the pret.2sg. does not differ from that of the 1&3sg. The WGmc form is perhaps in origin an aorist, whilst the other forms are in origin perfects, see Bammesberger (1986b: 47). The inflexion in East and North Gmc is *-t*, and this would probably have caused phonological changes producing allomorphy of the stem within the paradigm, e.g. **rid-t* > **ritt* > **riss* 'rode'. This may explain why the aorist form was substituted for the perfect. Cf. Shields (1995), arguing that the WGmc inflexion, preserved in the preterite-present verbs, see §6.143, differs from the one reflected in East and North Gmc.

⁵ The infinitive is etymologically the nom.-acc.sg of a (neut.) verbal noun formed with PIE **-on-o-*, to which the case ending **-m* was attached; on other cases of the verbal noun, see the following note. This verbal noun stem is not found in inf. function in IE languages outside of Gmc.

⁶ The inflected infinitive or gerund bears a dative *ja*-stem ending. In addition, cases of the inflected infinitive other than the dative are found in OSax and OHG, see Krahe and Meid (1969: II, §83.1).

6.9 With the following four exceptions, the forms in §6.6 directly reflect those in §6.8: (a) WS pres.ind.1sg. *bīde* does not reflect **bīdō*, see §6.11; (b) pres.ind.2sg. *-st* was formed when the ending **-is* attracted to itself the *t* in the construction **-istu* < **-is þu*, in which **þ* became a stop by dissimilation from the preceding fricative, see further §§6.14–15; (c) in the subj.2sg., the WS ending *-e* most likely does not reflect pres. **-æz* and pret. **-īz* but is analogical to the 1&3sg;¹ (d) the ending of the inflected infinitive should be *-enne*, with *i*-umlaut, and this form does occur. The ending *-anne*, much commoner in EWS than *-enne*, must be explained as analogical, probably to the uninflected infinitive.

¹ Cf. pres. OSax *-es*, OHG *-ēs*, pret. OSax *-is*, OHG *-īs*. If these endings had **-s* rather than **-z* in WGmc, as would thus appear to have been the case (though many assume otherwise, e.g. Campbell, 1977: §731(b)n1), **-s* should not have been lost in OE on a phonological basis.

6.10 The Gmc preterite, which is a tense, represents an amalgam of the PIE perfect and the PIE aorist, which are categories of verbal aspect, the former expressing completed action and the state that results from it, the latter momentary action. In the WGmc pret.ind., the 1 and 3sg. stems and endings are to be derived from PIE perfect formations, whilst the 2sg. and the pl. stems and endings are to be derived from PIE aorists.

(a) *Indicative present*

6.11 WGmc pres.ind.1sg. **bīdō* ought to produce OE ***bīd*, with the change **-ō* > **-u* and subsequent high vowel apocope after the heavy syllable, but this form is nowhere found. The ending *-u/o* ought to be retained after light syllables, and it is found there in Angl, on the analogy of which it must have been restored after heavy stems.¹ WS *-e* in the pres.ind.1sg., which is also the commonest ending in Ru1, is of disputed origin, but it

is usually regarded as borrowed from the subjunctive.² Except in poetry and in WS texts that display some Anglian features, the only instance of pres.ind.1sg. *-o* (from *-u*) in WS is CP 397.25 *cweðo* ‘I say’. The early Kt charters have usually *-e*, but cf. Ch 1510 *hāto* ‘command’, *biddo* ‘bid’, perhaps under Merc influence. PsGl(A) occasionally has *-e* for *-o/-u*,³ whilst *-e* is the commonest inflexion in Ru1, though INbr alternates *-o/-a/-u/-e*, as might be expected due to the merger of most unstressed vowels in INbr, see firstly Hogg (1992b: §§6.59–62). The different treatments of the pres.ind.1sg. inflexion in Anglian, on the one hand, and West Saxon and Kentish, on the other, is entirely in keeping with developments in the 2&3sg.: in Angl, the original vowel is restored in the 1sg. as in the 2&3sg., see §§6.12–15, whilst in WS and Kt, syncope was generalized in the 1sg. as in the 2&3sg. and *-e* thereafter added in the 1sg.⁴

¹ Keyser and O’Neil (1985: 125–48) point out that final *-o* appears for *-u* in PsGl(A) only in this inflexion (the proportion is 274 <o> : 48 <u> according to Suzuki, 1988: 213), and accordingly they argue for a phonological basis for the retention of *-o*. For objections to such a phonological analysis, see Hogg (2000: 362); see also Murray (1995: 326–8).

² For a critique of this and other views, see Bazell (1938: 63–4), but cf. Cowgill (1965). Penhallurick (1978) argues that the subjunctive form was adopted in the first person as a mark of politeness to counter the self-assertiveness of self-reference.

³ Cf. also 1sg. PsGl(A) *ġebidda* ‘bid’, also weak *forðseġċga* ‘pronounce’, *onseċġ* ‘sacrifice’, once each, beside forms in *-u/-o*.

⁴ This insight concerning the way developments in the 1sg. parallel those in the 2&3sg. is owing to Suzuki (1988), though his analysis is rather that in WS and Kt the domain of *u*-apocope was extended by analogy to that of *i*-apocope, which does not seem a tenable position.

6.12 In WS and Kt, in the pres.ind.2&3sg. there is regularly Gmc vowel harmony before **i*, see Hogg (1992b: §§3.6–7), or *i*-umlaut of the root vowel, e.g. 2sg. *hilpst* ‘help’ (inf. *helpan*), 3sg. *brȳcð* ‘enjoys’ (inf. *brūcan*). In addition, as these examples show, there is as a rule syncope of the high vowel in the inflexion after a heavy syllable, less regularly after a light. Amongst the heavy stems, the chief exceptions are those verbs (all weak) that have a stem ending in a postconsonantal sonorant, e.g. *timbreð* ‘constructs’, *frēfrest* ‘comfort’, see further §6.96. Otherwise, when syncope does not occur after heavy stems in WS, the cause may be stylistic, or the text containing such forms may be of Angl origin.¹ Thus, for example, unsyncopated forms are the norm in poetry, except that southern compositions alternate between syncopated and unsyncopated forms, e.g. Met 3.7 *ðringð* ‘presses’, 5.15 *feldð* ‘falls’, etc., but 3.2 *swinceð* ‘labours’, 3.5 *forlæteð* ‘abandons’, etc. Syncopated, umlauted forms are the rule in Ælfric, but unsyncopated, unumlauted forms are not infrequent in EWS, under Mercian influence, see *ibid.*: §1.10. On the other hand, whilst unsyncopated heavy

stems represent a minority of forms in Alfredian prose, they are the norm in Bede and GD, both of Mercian origin, and in Or only in the section describing the voyage of Wulfstan to the mouths of the Vistula (Or 16.21–18.2). Amongst the light stems, syncope is least likely to occur in those stems ending in a sonorant. Yet even in these instances, syncopated forms may be quite common: e.g., *nimð* ‘takes’ (inf. *niman*) is twice as frequent as *nimeð*, whilst *færeð*, *fered* ‘goes’ (inf. *faran*),² the exclusive form in Ælfric, is far commoner than *færð*, *ferð*. For details regarding the proportions of syncopated to unsyncopated forms with each sonorant, see Ringe (2002: 132–4). As regards light stems ending in other consonants, forms like *gyfeð* ‘gives’ (inf. *gyfan*) and *bideð* ‘asks’ (inf. *biddan*) are generally missing from WS, except in texts that show some Angl features.³ On the situation in Angl, see §§6.15–19.

¹ See §6.15n1. The data for all dialects are collected by Hedberg (1945: 285), who finds the following proportions of unsyncopated to syncopated verb forms in texts representing the various dialects: in Kt, 7 : 131; in WS, 660 : 8782; in Merc, 883 : 39; in Nbr, 1283 : 5. He reserves as separate categories texts that show a mixture of WS and Kt features (279 : 1696) and those that show a mixture of WS and Angl features (2802 : 2500).

² On the vocalism of *fær(e)ð*, see Hogg (1992b: §5.79(2d)).

³ These findings, based on the *DOEC*, are somewhat at variance with those of Brunner (1965: §358A5) and Ringe (2002: 134).

6.13 If the stem ended in a dental consonant or an obstruent, the consonant clusters resulting from syncope in the pres.ind.2&3sg. often underwent such processes of assimilation as are described in Hogg (1992b: §§7.88–9, 7.92). Thus:

- (a) *-þ-st* > *-sst* > *-st*, as in *cwist* ‘say’ (inf. *cweðan*), *wyrst* ‘become’ (inf. *weorðan*); but *þ* might be restored analogically, e.g. ÆCHom II, 3 26.246 *cweðst* ‘say’, and the restored cluster might undergo dissimilation to *-tst*, e.g. Alc (Warn 35) 425 *cwyttst* ‘say’;
- (b) *-d-st* > *-tst*, as in *stentst* ‘stand’ (inf. *standan*), *hyltst* ‘hold’ (inf. *bealdan*), and then *-tst* may yield *-st*, e.g. ÆCHom II, 45 336.36 *hylst* ‘hold’; likewise original *-tst* may be so reduced, e.g. Solil 1 47.12 *onğyst* ‘perceive’ (inf. *onğytan*);
- (c) *-g-st* > *-hst*, as in *lȳhst* ‘lie’ (inf. *lēogan*), *drīhst* ‘suffer’ (*drēogan*); this *-hst* is never spelt *-xt*, though original *-hst* is rarely so spelt, e.g. ÆHom 13.127 *ğesyxt* ‘see’ (inf. *sēon*);
- (d) *-c-st* > *-hst* rarely, as in weak *tāhst* ‘teach’;
- (e) *-ng-st* > *-ncst*, as in *ğebrincst* ‘bring’ (inf. *bringan*);¹ cf. also Exod 29.21 *†sprenst* ‘sprinkle’ (weak);²
- (f) *-t-þ*, *-d-þ* > *-tt* (> *-t*), as in *hāett*, *hāet* ‘commands’ (inf. *hātan*), *lāett*, *lāet* ‘leads’ (inf. *lāedan*), *fint* ‘finds’ (inf. *findan*);

- (g) *-s-þ* > *-st*, as in *rīst* ‘rises’ (inf. *rīsan*), *frȳst* ‘freezes’ (inf. *frēosan*), also *wixt* ‘grows’ (inf. *weaxan*, where *x* = *hs*);
- (h) *-g-þ* > *-hþ*, as in *stihð* ‘climbs’ (inf. *stīgan*), *flihð* ‘flies’ (inf. *flēogan*);³
- (i) *-c-þ* > *-hþ*, rarely, as in *forbryhð* ‘breaks’ (inf. *forbreccan*), weak *wrehð* ‘arouses’ (inf. *wrecċan*);⁴ or occasionally *-c-þ* > *-ct*, as in weak OccGl 49 656 *ofðrect* ‘presses’ (inf. *ofðryccan*), 604 *gehyðlēct* ‘repeats’ (inf. *geedllēcān*);
- (j) *-ng-þ* > *-ncþ*, as in *brincð* ‘brings’ (inf. *bringan*).

A few other assimilations are quite isolated, thus PsGl(A) *gefihht* ‘rejoices’ (inf. *gefēon*), *onfōēht* ‘accepts’ (inf. *onfōn*), weak CP(C) *gegypt* ‘reveals’ (inf. *yppan*).⁵ Analogical restorations, however, are not uncommon, e.g. *stendst* ‘stand’, *asingst* ‘sing’, *hātð* ‘commands’, *arīþ* ‘rises’, *astīgþ* ‘climbs’.

¹ The change is attested in this verb only. Campbell (1977: §732) cites a by-form *brinst* which we are unable to authenticate, but for a phonological parallel cf. Gen 46.3 *strensta* ‘strongest’.

² The form is in Oxford, Bodleian Library, Laud Misc. 509. See the edition of Marsden (2008: 121).

³ In LWS this change is rare after light syllables, but Ælfric has *wihð*, *aweihð* ‘weighs’, once each.

⁴ As a consequence, the reverse spelling *-cð* for *-hð* is sometimes found, as in *underfēcð* ‘accepts’ (inf. *underfōn*), *forswylcð* ‘swallows’ (inf. *forswelgan*).

⁵ The forms in Bo and Met reported by Brunner (1965: §359A9) as illustrating the change of *-þ* to *-t* after *-h-*, *-f-* are not to be found in the DOEC.

6.14 Since high vowel syncope is not to be expected in a final syllable closed by one or more consonants, the likeliest explanation for syncopated verb forms in pres.ind.2&3sg. is that the syncope originated in phrases in which a pronoun followed and received greater stress than the preceding inflexion, e.g. **brūcis þū* ‘you enjoy’, **bindiþ hē* ‘he binds’. In the second person, at least, such phrases could be lexicalized, producing forms like Li *gesiistu* ‘you see’, *cuoedestu* ‘you say’.¹ Especially in relatively early texts, in fact, e.g. CP(H), the 2sg. ending frequently takes the form *-sð*; and for the most part, Angl texts retain a form of the ending without final *-t*, but see §6.17. Although there is no comparable lexicalization evidenced by spellings in the third person, the same conditions for syncope should have been found there, since they are also attested by spellings of the 1sg. like Beo *wēn ic* (for *wēne ic*) ‘I expect’ (2×) and Li *forġeldig*² ‘I repay’, *willic* ‘I will’, for *forġeldo ic*, *wille ic*.³ Suzuki (1988: 218–19) offers compelling parallels in the Older Futhark and all the older WGmc languages. Since a pronoun would not have followed the verb under all circumstances, presumably the alternation between syncopated and unsyncopated forms was eliminated in WS and Kt by the analogical extension of the syncopated

forms to all syntactic environments. This analysis explains why syncope is regular only in verbs with heavy stems, since syncope after light syllables was late and sporadic at best, see Hogg (1992b: §§6.67–9). For an alternative view, see n3.

¹ The assumption here is that *-st-* behaves like a unitary phoneme, the way it does in syncopated WS superlatives like *h̄ȳhsta* ‘highest’, *nȳhsta* ‘next’, see Hogg (1992b: §6.24.2), and in regard to the IOE or eME shortening of long vowels in closed syllables, since it does not cause shortening of a preceding vowel (cf. PDE *waste*, *most*, *least*, etc.). As for the third person, Luick (1922: 196–7) proposed that a phrase like **bindiþ hē* was pronounced **bindiþē*.

² On this spelling, see Hogg (1992b: §7.52).

³ This explanation was first advanced by Walde (1900: 125n1). See Fulk (1992: §§319–21) for discussion and references. The objection of Ringe (2002: 127–31) that postpositive prepositions occurred too infrequently to induce the analogical spread of syncope does not seem compelling, considering the high frequency of postpositive pronouns in the DOEC (e.g., *þū* and *ðū* are enclitic upon a verb in the pres.ind. more than 100 times in ÆCHom, and by no means only in questions), and considering that explaining why WGmc has the 2sg. inflexion **-is* rather than **-iz* is difficult without the assumption that **-z* was devoiced before **þu*, see Fullerton (1975), and cf. **þrūtez-fellan* > Got *þrūtsfill*, OE *þrūstfell* ‘leprosy’. Ringe’s own explanation demands the assumption of forms with no reflexes in Gmc: thus, he argues that the final vowel of PIE pres.ind.2&3sg. inflexions **-sī*, **-ti* was preserved up to the time of Pre-OE syncope, and syncope and apocope applied categorically to forms like **riki(j)u* and **hau̯budu*, so that OE *riču*, *hēafod*, *hēafdu*, *hēafodu* must all be regarded as analogical replacements of **rič*, **hēafd*. The hypothetical elements of this are plainly numerous in comparison to those of Walde’s explanation. For counterevidence, see §6.15.

6.15 In Angl and in most poetry, syncope and *i*-umlaut (or vowel harmony) fail in pres.ind.2&3sg. verbs. They also fail frequently in non-Ælfrician LWS, though whether this is because unsyncopated forms are a mark of the elevated style characteristic of homilies (which make up the greater part of the non-Ælfrician LWS corpus), or a result of authorial or scribal dialect, is disputed.¹ Thus we find, e.g., PsGl(A) 2sg. *haldes* ‘hold’, *oncnāwes* ‘recognize’, *astīges* ‘ascend’, 3sg. *haldeð*, *oncnāweð*, *astīgeð*. It is usually explained that syncope occurred regularly in Angl and, along with *i*-umlaut, was subsequently levelled out of these verb forms. If the explanation offered in §6.14 is correct, however, it is likelier that syncope was never widespread in Angl. If widespread syncope was levelled out, it would be surprising to find that *i*-umlaut was not levelled out at the same time, since the early Merc glossaries show sometimes *i*-umlaut or Gmc raising of **e* before **i* but no syncope in relevant forms, thus EpGl *scripīt* ‘scratches’, *milcīþ* ‘milks’, also weak *cāēlith* ‘cools’. Assuming that syncope was never widespread in Angl explains why in heavy stems syncope is found in the second person only when a pronoun follows,² thus PsGl(A) *acers ðū* ‘you turn away’, Li *gehērs ðū* ‘you hear’, both weak.³

¹ For discussion, see Fulk (2008: 84; 2010a; forthcoming).

² An exception is the Merc MtGl(Ru) 27.11 *cwiðst*.

³ These reasons tell against the hypothesis of Ringe (2002) that all heavy-stemmed verbs underwent syncope, with extensive analogical restoration in Anglian, on which see §6.14n3. Further issues are discussed in Fulk (1992: §§319–21; 2010c).

6.16 Except in contracted verbs, see §6.40, in PsGl(A) syncope is found only in *cwið*, *cyð* ‘says’, where umlaut is also maintained. Syncopated *cwið* is also found in poetry and in LWS texts that otherwise commonly employ Anglian unsyncopated verb forms, e.g. the Blickling and Vercelli Homilies. In a number of instances PsGl(A) retains *i*-umlaut in unsyncopated forms, but only when the umlauted vowel is *i*, e.g. *bireð* ‘bears’, *gildeð* ‘pays’, *ites* ‘eat’, *swilteð* ‘dies’, *trides* ‘tread’, *fortrideð* ‘treads down’. A few syncopated forms are in evidence in Ru1, e.g. *cwiðst* ‘say’, *cwið* ‘says’, *cymð* ‘comes’, *ġewyrð* ‘becomes’, all with umlaut, and all alongside unsyncopated and unumlauted forms of the same verbs, whilst Nbr has a syncopated verb perhaps only in Li *ġehērs ðu* ‘you hear’ and *cēið* ‘calls’, perhaps Ru2 *ġicēeð* (or *ġicēeð?*) ‘calls’, probably not Li *ġehēht † hāet* ‘commands’.¹ In eKt, under Merc influence, verbs are unsyncopated, but in OccGl 49 verb forms are generally like WS ones, though *e* (sometimes spelt <y>, see Hogg, 1992b: §5.194) may be restored, e.g. *cyrd* ‘turns’, *ġelpð* ‘boasts’, *tret* ‘treads’; and sometimes *-et* appears for *-eð*, e.g. *forberet* ‘humours’, *aweġet* ‘weighs’, see §6.18.

¹ The gloss is on Lat *imperat* pres., but *ġehēht* can only be preterite, and so *hāet* may be, too: cf. WS *hēt*, and on *ā* for *ē* in Li, see Stolz (1908: §6). On some doubtful instances of syncopated forms of *cweðan* in Li, see Hedberg (1945: 211).

6.17 The earlier form of the pres.ind.2sg. ending *-(e)s*, without final *t*, is found in some early texts such as the early Merc glossaries, and cf. Kt OccGl 49 852 *āġelts ðu* ‘you repay’, also weak 136 *ðu on arets* (for *aset*s, see Kalbhen, 2003: 171) ‘you set on’. The change of the ending from *-(e)s* to *-(e)st* appears to have begun in contracted forms, see §6.40. Thus, for example, PsGl(A) has *onfōēst* ‘accept’ and *ġesīst* ‘see’, otherwise only forms in *-(e)s*. In Ru1, *-(e)s* and *-(e)st* alternate, whilst the latter is uncommon in Nbr, found chiefly in contracted forms, e.g. Li *ġesiist* beside *ġesiistu* ‘you see’.

6.18 In the very earliest texts, the 3sg. ending may still be spelt with <i>, as in LRid 3 *blimmūth* ‘resounds’. Spellings with <i> are sporadic in later Angl. As the example illustrates, the final sound may be written <th> in early texts, especially in the early Merc glossaries. In those, as well as in various Angl texts, and with weak verbs in CP, the spelling may occasionally be with <t> or <d>, e.g. Ru2 *ġiscīnet* ‘shines’, *fallet* ‘falls’, Ru1 *cymid*

‘comes’. The form *-et* also occurs in Kt OccGl 49, see §6.16.¹ At least in texts later than the early Merc glossaries, the variant in <d> may be due to scribal error, as failure to cross the upstroke of <ð> is a common scribal mistake.

¹ The ending *-et* probably originated as a sandhi variant before words beginning with fricatives, where [θ] would have developed to [t] by dissimilation.

6.19 In INbr, there is much variation in the spelling of the vowels of all the verb inflexions, so that the pres.ind.2sg. inflexion may be *-es*, *-as*, *-æs*, the 3sg. *-eð*, *-að*, *-æð*, with comparable variation in the latter inflexion also in the Merc Ru1. Furthermore, in Nbr the 2sg. ending frequently replaces the 3sg., e.g. *cuoedas*, *-es*, *-æs* beside *cuoedað* ‘says’, a change that became the basis for the ‘northern subject rule’ first observable in ME. This equivalence led to the occasional use of endings in *-ð* in the 2sg., thus Li *gēlēfeð*, DurRitGl *gīlēfeð* ‘believe’.¹

¹ For a thorough treatment of the 2sg. endings, see Flasdieck (1934). The origin of the inflexions in *-s* is much contested. They are very commonly said to be the result of Scandinavian influence. For counterarguments, with references, see D. Miller (2002).

6.20 The pres.ind.pl. inflexion *-að* has the same variants that are to be expected on the basis of the variants of 3sg. *-(e)ð*, see §§6.18–19. Thus, *-ad* and *-at* occur occasionally, as in PsGl(A) *bicumad* ‘occur’, *cweoðad* ‘say’, weak CP(H) *lærat* ‘teach’, and the vowel of the ending is spelt variously in INbr and in Ru1, as in *-að*, *-eð*, *-eþ*. In addition, the *-s* that has spread from the pres.ind.2sg. to the 3sg. has also spread not infrequently to the plural in INbr, as in Li *cuedas* ‘say’, *cym(m)es*, *cymæs* ‘come’.

(b) *Indicative preterite*

6.21 Pret.ind.2sg. *-e* reflects WGmc **-i*, which should have been lost after a heavy syllable, e.g. **bindi* (*þū*) ‘(you) bound’. Presumably it was restored by analogy to the ending retained after light syllables, as with **witi* > *wite* (*ðū*) ‘(you) departed’, cf. §6.11 on the similar analogical development in the Angl pres.ind.1sg. Although pret.ind.1&3sg. *-Ø* properly results from the PGmc loss of the PIE perfect inflexions **-a* and **-e*, respectively, WGmc 2sg. **-i* most likely reflects the PIE thematic aorist ending **-e-s* > PGmc **-iz*.¹ East and North Gmc, by contrast, retain a 2sg. ending *-t* derivable, with some analogical levelling, from the PIE perfect, see Krahe and Meid (1969: II, §73), and this is preserved in OE preterite-present verbs, see §6.142. Occasionally *-e* is omitted when the pronoun *ðū* immediately follows, e.g. ÆGram 224.4, 232.2 *cōm ðu* ‘did you come’, Soul I 17 *druh ðū* ‘did

you suffer'. Possibly this is due to a reduction similar to that before an enclitic pronoun described in §6.7, but perhaps it is due in some instances simply to scribal misapprehension of the construction as imperative. In INbr and in Ru1 the weak pret.2sg. ending *-es(t)* may be attached to verbs of the seventh class with a stem ending in *t*, as in Li *hēhtes* 'commanded', *forleortes* (beside *forleorte*) 'let'.

¹ A difficulty with this derivation is that the PIE aorist had accent on the theme vowel rather than the root, leaving no opportunity for Verner's Law to apply to the following fricative in Gmc, see Hogg (1992b: §§4.4–5); and if PIE **-es* produced **-is* rather than **-iz* in Gmc, **-s* should not have been lost in OE, cf. developments in the pres.ind.2sg. No persuasive explanation has been offered; the comments of Barnes (1975) are generally unhelpful.

6.22 Pret.ind.pl. *-on* is the development of earlier *-un*, the latter of which is rare in WS but frequent in the early Merc glossaries and in PsGl(A). The variant *-an*, not uncommon in EWS, occurs in all dialects, and *-en* is to be found occasionally in Angl texts. Final *-n* is not generally lost from this ending in Nbr, except in RuneRuthwellA *cwōmu* 'came' and weak *bismærædu* 'humiliated'. On the use of the prefix *ge-* with preterites, see §6.30.

(c) *Subjunctive*

6.23 The distinction between ind. and subj. forms is for the most part maintained in EWS, but in LWS pl. *-on* spreads from the ind. to the subj., both pres. and pret., and *-on*, *-an* are found sometimes even in EWS in the pret. In Nbr, and often in Ru1, sg. and pl. inflexions are undifferentiated after the loss of final *-n*, the plural inflexion appearing as *-e*, *-a*, *-æ*, rarely *-en*. But ind. *-on* (*-un*, *-an*) not infrequently invades the pret.pl.subj., see e.g. Kolbe (1912: §211). On umlaut in the pret.subj., see §6.25.

6.24 In EWS, beside *-en*, *-on*, *-an*, the pl. of both pres. and pret.subj. may bear the inflexion *-e*, e.g. Or 100.31 *fuhte* 'fought' pl. In the pres. this is restricted to instances in which a pronoun precedes the verb; it is commoner and more widespread in the pret. The incidence is high enough in the pret., but not the pres., to suggest that here *-e* may be etymologically correct and *-en* an analogical replacement on the basis of the pres. Campbell (1977: §473) supposes that final *-n* was lost more commonly after **-ī-* than after other vowels, and he points to the oblique ending *-e* in *m̄n*-stem nouns, see §2.89n1. Alternatively, loss of *-n* may have occurred in sandhi, when a consonant group was formed by final *-n* and a following word-initial consonant, see Hogg (1992b: §§7.10, 85), also Luick (1914–40: §680). But this would require analogical extension of forms in *-e* to other sandhi environments, and it would not explain why *-e* is commoner in the pret.

6.25 As the pret.subj. inflexions all contained PGmc **i*, see §6.8, umlaut should be expected in the root. Whilst umlaut is normal in the NGmc pret.subj., and it occurs in the present of some preterite-present verbs in OE, see §6.134, there is no indisputable example amongst strong verbs. The likeliest example is JnGl(Ru) 13.6 *ðwōēge* 2sg. ‘cleansed’.¹ Rather, preterite subjunctives in the earliest glossaries point to the conclusion that the endings of the present subjunctive were extended to the preterite at an early date in thematic verbs, e.g. EpGl, ErfGl 1 *suicudae* ‘deceived’ (weak).²

¹ For a discussion of some other, very insecure examples, see Brunner (1965: §377A), and cf. Bammesberger (1982b: 414–15).

² See Bammesberger (1982b: 415–16).

(d) *Imperative*

6.26 The original Gmc. imper.2pl. inflexion was identical to the ind.2pl. inflexion. When the latter was replaced in NSGmc by the ind.3pl. inflexion, so was the former, giving OE *-aþ*. In INbr this may also be *-as*, as in the indicative, less often *-eð*, *-es*, *-æð*, *-æs*. And of course when a 1 or 2pl. pronoun follows, the ending may be *-e*, see §6.7.

(e) *Non-finite forms*

6.27 On the origin of the infinitive, inflected and uninflected, see §6.8nn5–6. As might be expected, the uninflected infinitive inflexion *-an* is reduced to *-a* in Nbr, and frequently in Ru1, beside which may appear *-e*, *-æ*, *-o*. The etymological inflexion *-enne* of the inflected infinitive, which is missing altogether from PsGl(A) (which has only *-anne*), is in all dialects but Ikt less frequent than unumlauted *-anne* (rarely *-onne*, *-ane*, *-ene*), see §6.9. Late Kt OccGl 49 has only *-en(n)e*. Not infrequently in poetry, an uninflected infinitive is found for an inflected one, e.g. Beo 2556 *to friclan* ‘for desiring’, though often scribes have substituted inflected for uninflected forms that can on that account be detected only on the basis of metrical scansion, see Fulk (1992: §3, with references). Uninflected infinitives after *to* are uncommon in prose, e.g. ÆHomM 1 55, ArPrGl 1 40.46 *to bēon* ‘to be’.

6.28 Present participles are declined both definite and indefinite, the way most adjectivals are. When they are indefinite, they are inflected like *ja-* and *jō-*stem adjectives, i.e. like *wilde* (§4.32). The WGmc inflexion **-andi* of the present participle is reflected as *-endi*, *-ændi* (once *-indi*) in the earliest texts, e.g. weak EpGl 293 *risaendi* ‘shaking’ (inf. *hrisian*). Later, in all dialects it is most commonly *-ende*, with a few mostly unsurprising variants, such as *-ande*, *-onde*, *-ænde*.

6.29 Past participles are declined both definite and indefinite, like disyllabic adjectives, §§4.44ff. In PGmc, the past participle of strong verbs was formed by the addition of the suffix **-an-*, to which normal definite and indefinite adjective inflexions were added. PGmc **-an-* reflected PIE **-on-*, to which there was the ablaut alternant **-en-*, giving PGmc **-in-*, reflected in some early forms, e.g. EpGl 606 *forslegīnum* ‘slain’, cf. 385 *gibaen* ‘given’, etc. As in this *forslegīnum*, the suffix **-in-* would cause umlaut to appear in OE words, e.g. Or 115.10 *ūtancymen* ‘foreign’, MtGl(Li) 11.21 *gēwoerden* ‘become’.¹ The suffix **-an-* should have developed to **-un-* in PGmc when followed by /u(:)/ in the next syllable, see Hogg (1992b: §3.34), and cf. the cases affected in the formally similar *n*-stems, §2.84. This **-un-* could then be extended analogically to other cases, and this may be what is reflected in forms like CorpGl 2 5.390 *gēborone* ‘borne’, Ruin 6 *undereotone* ‘undermined’, 7 *forweorone* ‘decayed’; in the latter two, the back mutation in the root is difficult to explain without this assumption.

¹ The form MtGl(Ru) 14.3 **gībroecen* often cited in this connexion is a ghost: the form in manuscript is *gībrocen*, see Oxford, Bodleian Library, Auct. D. 2.19, fol. 77v12 in Liuzza and Doane (1995).

6.30 There is a tendency for the prefix *gē-* to be added to a past participle that does not already bear a prefix, though there is wide variability from verb to verb. Thus, for example, in the *DOEC* the rough proportion of past participles with *gē-* to those without any prefix for the verb *čēosan* ‘choose’ is 107 : 1; for *helpan* ‘help’ 3 : 1;¹ for *niman* ‘take’ 9 : 1; for *cweðan* ‘say’ 2 : 1. This tendency is very strong in most transitive verbs, though the rule is not inflexible, see Hogg (1992c: 148). Thus, for example, the ratio for the uninflected past participle of transitive *writan* ‘write’ is 9 : 1, for *biddan* ‘command’ 11 : 1, whilst for intransitive *cuman* ‘come’ it is about 1 : 20, but for *feallan* ‘fall’ 7 : 1. Yet there is also a tendency, though less strong, to add *gē-* to preterites of all sorts: the rough proportion of *gē-* to Ø- in preterites for *čēosan* is 10 : 1; for *helpan* 2 : 1; for *niman* (1&3sg. only) 1 : 1; for *cweðan* 1 : 63. The present stem may also add *gē-*, usually without apparent change of meaning, though this happens less frequently, e.g. for unmutated stems of *čēosan* 2 : 1; for *helpan* 1 : 3, for *niman* 1 : 2, for *cweðan* 1 : 68. The significance of *gē-* is much contested.²

¹ Unprefixed *holpen* occurs only in DurRitGl (5x).

² For references, see Fulk, Bjork and Niles (2009: cl, n11); also Crouch (1995).

2 Stems

6.31 Strong verbs are characterized by alternations in the form of the stem resulting from ablaut alternations in PIE.¹ Excluding minor variants,

strong verbs exhibit no more than four discrete forms of the stem, and so for every strong verb it is conventional to list four principal parts, even when the stem is identical in two or more of those parts. The four principal parts are: (i) infinitive, containing the unumlauted form of the present stem as well as of imperative forms and non-finite forms other than the pa.part.; (ii) pret.ind.3sg., with the same stem as the pret.ind.1sg.; (iii) pret.ind.pl., with the same stem as the pret.ind.2sg. and pret.subj.; (iv) past participle.

¹ On the derivation of individual Gmc strong verb stems, see Seebold (1970).

6.32 Strong verbs in the early Gmc languages are conventionally divided into seven classes on the basis of the patterns of vowel alternation found in the formation of present and preterite stems in PGmc. In the first six classes the variants result from ablaut alternations in PIE. The differences amongst classes 1–5 are largely due to sound changes in Gmc, since, with few exceptions, the vocalism reflects a PIE ablaut pattern *e* : *o* : \emptyset , with **e* in the pres., **o* in the perfect sg., and * \emptyset in the aorist or perfect pl. and pa.part. Class 6 departs from this pattern, but the alternations that it displays nonetheless involve ablaut variants. The unifying characteristic of class 7, as revealed by this class in Gothic, is that, sometimes in addition to showing ablaut variants, verbs originally formed the preterite with a reduplicative prefix, just as with the PIE perfect. Most verbs of class 7 showed no difference in ablaut grade between present and preterite singular, and it is for this reason that reduplication was preserved in these verbs in PGmc whilst it was abandoned in the other six classes, to distinguish more plainly present and preterite stems.¹ A few relic forms survive in OE and other NWGmc languages to show that reduplication was once to be found in class 7 in these languages, too, but they all show a regular re-formation of the method of forming the preterite, see §6.70. It will become apparent in the discussion below that a synchronic grammar of OE would have to recognize a great many more than seven classes of strong verbs, since already in PGmc the seven classes were not uniform in regard to stem formation, and prehistoric sound changes have introduced a great deal more diversity within each OE class. The sevenfold taxonomy is thus useful chiefly for historical and comparative purposes. Yet even in a synchronic grammar some regularities would have to be recognized, as evidenced particularly by instances in which stem alternations have undergone change on an analogical basis, e.g. in regard to contracted verbs of classes 1 and 2, see §6.45.²

¹ See Jasanoff (2007: 243–4).

² Cf. Krygier (2001), reaching the opposite conclusion. On the disunity within each of the seven classes and the non-abstractness of underlying representation, see Levin (1964) and Johnson (1986), respectively.

(a) Ablaut patterns

6.33 Amongst the seven classes of strong verbs which are generally recognized in OE, in the first six the patterns of ablaut alternation and stem formation are comparatively regular. With variations explained below in the context of discussion of each individual class, the chief ablaut alternants in OE may be identified as these for principal parts (i–iv) in classes 1–6:

class	(i)	(ii)	(iii)	(iv)
1	ī	ā	i	i
2	ēo	ēa	u	o
3	e	æ	u	o
4	e	æ	ǣ	o
5	e	æ	ǣ	e
6	a	ō	ō	a

There is great variety in the ablaut patterns encountered in the seventh class, see further §6.76.

6.34 As remarked in §6.32, most of the ablaut alternations tabulated in §6.33 may be derived from a PIE alternation (i) *e* (ii) *o* (iii–iv) \emptyset . In class 1 this alternation takes the form **ey* : **oy* : **i* in PIE, i.e. the ablauting vowel followed by the glide **y*, for example in the root **leyp-* : **loyp-* : **lip-*, in the last of which the approximant **j/* between consonants in the absence of a vowel is realized as the syllabic allophone **[i]*. In PGmc, the sequences **ey* and **oy* developed to diphthongs, **ei* (> **ī*, Hogg 1992b: §3.3) and **ai* respectively, the latter developing in OE to *ā* (ibid.: §§5.7–9), hence the OE ablaut alternation *ī* : *ā* : *i*. In class 2 the PIE alternation was **ew* : **ow* : **u*, yielding PGmc **eu* : **au* : **u*, which developed normally to OE *ēo* : *ēa* : *u* (ibid.: §§5.41ff.). In regard to *u* in this series, it remains in OE in principal part (iii), where it was followed by **u* in the next syllable in the pret. plural, e.g. WGmc **budun* > *budon* ‘commanded’, whilst in principal part (iv) it was lowered to *o* before **a* in the next syllable (ibid.: §3.10), e.g. WGmc **budanaz* > *boden*. In class 3 the PIE alternation was **eRC* : **oRC* : ** \emptyset C*, where *R* = /r, l, m, n/¹ and *C* = any obstruent, regularly yielding PGmc **eRC* : **aRC* : **uRC*, usually with development of **uRC* to OE *uRC* or *oRC* under the same conditions as in class 2. The underlying pattern in this class is much obscured by various subsequent phonological developments, see §6.51. In class 4 the PIE alternation was as in class 3, but with a vowel rather than an obstruent after *R*, and the development was to PGmc **eR* : **aR* : **uR*,² again with lowering of **u* to *o* in the fourth principal part. The third principal part in class 4 (as well as class 5) does not conform to the predicted ablaut pattern, since the

vowel in OE is not $*u$ but WS \bar{e} , non-WS \bar{e} . Of the various explanations that have been proposed, the likeliest are that Gmc $*\bar{e}$ in the plural originated in the verb $*etan$ in class 5 (see below), resulting from contraction of the root vowel (of the singular) with the reduplicative vowel $*e-$ of the PIE perfect or the augment $*e-$ of the PIE imperfect, see §6.70, or the vowel \bar{e} in the pret.pl. of class 4 stems from an aorist comparable to Lat $s\bar{e}dimus$. Neither of these explanations is without difficulties.^{3,4} A promising new direction links the long vowel to the possible influence of related gerundives in $*-i-/ja-$, e.g. the etymon of OE $-b\bar{e}re$ (as in $w\bar{e}stmb\bar{e}re$ ‘fruitful’) beside $beran$ ‘bear’, see Heidermanns (1999). The stems of class 5 are structured like those of class 4, except that the postvocalic consonant is not a sonorant. As a consequence, in the fourth principal part there is no development of Gmc u from a syllabic sonorant, and instead the vowel is Gmc $*e$, sometimes regarded as the reflex of schwa secundum, e.g. by Prokosch (1939: §59).⁵ The ablaut alternations in class 6 are plainly unlike those in classes 1–5 and do not reflect the PIE pattern $e : o : \emptyset$. They are thought to reflect in part alternations between full and reduced grades of PIE stems containing $*H$, e.g. PIE $*weH-dh-$ > $*w\bar{a}dh-$ > OE $w\bar{o}d$ ‘advanced’ and PIE $*wH_2-dh-$ > OE $wadan$ inf.⁶ This cannot have been the only source, however, and it is unclear why there should be reduced grade in the first and fourth principal parts and full grade in the second and third. Theories designed to explain this generally rely heavily on the assumption of analogical developments.⁷

¹ But some verbs of class 3 contain no sonorant in the stem, e.g. $feobtan$ ‘fight’, $bregdan$ ‘weave’, see §6.51n1.

² Antevocalic $*R$ (rather than $*R$) should not actually have occurred after an initial consonant in PIE. It might be assumed that this is a sandhi variant extended from contexts in which the initial consonant of the verb formed a cluster with a preceding word-final consonant, with syllabification under Sievers’s Law, see Collinge (1985: 159–74). Rather, Prokosch (1939: §59) explains Gmc $*u$ here as the development of schwa secundum before a sonorant, cf. below in regard to class 5. At all events, Gmc $*u$ here is unlikely to be purely analogical but would seem to have some phonological basis, given the different development in class 5.

³ Analogy to the pret. of $*etan$ is the view of Mottausch (2000), supported by Mailhammer (2007: 67–86), both of whom offer a conspectus of the many explanations that have been offered. Cf. Kortlandt (1992) and Tanaka (2006), the latter with counterarguments. Derivation from an imperfect is the suggestion of Bammesberger (1986b: §7.4.4). That \bar{e} is not the original vocalism is indicated by the plurals $s\bar{c}ulon$, $g\bar{e}munon$, $g\bar{e}nugon$ of preterite-present verbs originally belonging to class 4, see §§6.136–7. On the possibility of regular lengthened grade in the singular of the sigmatic aorist in PIE, see Szemerényi (1996: §§9.4.2.1(c), 6.2.8 Addendum 1).

⁴ Lass and Anderson (1975: 32; cf. J.M. Anderson 1970: 177) propose a phonological lengthening rule with grammatical conditioning in verbs with a single stem-final consonant. But historically, at least, the problem must have a morphological explanation.

⁵ As the parallel with classes 1–4 suggests, reduced ablaut grade is to be expected in the fourth principal part, though OE e appears to reflect a full-grade vowel. In the presence of a sonorant, reduction of the ablaut vowel in the fourth principal part

produces reduced grade in the form of a PIE syllabic sonorant. When no sonorant (or laryngeal consonant, see n6 below) is present, reduction of the ablaut vowel would normally produce zero grade, i.e. non-syllabicity. If reduced syllabicity were somehow maintained in the absence of a sonorant, perhaps on an analogical basis, the result would be a vowel referred to as schwa secundum, often written *ɚ* or *ɛ* and presumably representing [ə]. (On schwa primum, see below, n6.) Schwa secundum was subsequently realized as a full-grade vowel. The rationale for positing the existence of a schwa secundum is doubted by many, e.g. Szemerényi (1996: §4.1.11). It seems necessary, however, to account for a form like Grk *πεπτός* ‘cooked’, which, being a pa.part., ought to have reduced grade in the root. Mottausch (2000: 53), supported by Mailhammer (2007: 68–9), argues, to the contrary, that full-grade *e* in the pa.part. of verbs of class 5 is of relatively late analogical origin.

⁶ **H* is referred to as a ‘laryngeal consonant’, perhaps one of several such consonants, perhaps not actually laryngeal in nature, presumably a fricative of some sort, see Lindeman (1987). The syllabic form **H̥* corresponds to schwa primum (**ə*) in earlier reconstructions of PIE, since it was once thought simply to have been a vowel. Its reflex in Gmc stressed syllables is *a*. **H* was lost after a vowel, with compensatory lengthening, producing **ē*, **ō*, or **ā*.

⁷ See, e.g., Prokosch (1939: §60), Bammesberger (1986b: 54–8). On the Gmc *a*-verbs see also Austefjord (1987), Mottausch (1996), Mailhammer (2007: 89–103), with references.

6.35 The ablaut alternants **e* : **o* : **Ø* posited in §6.32 correspond to alternations found in the different tenses of some other IE languages. This may be seen from an examination of each of the four principal parts of strong verbs: (i) the ablaut grade **e* reflected in the first principal part of strong verbs of classes 1–5 is commonly reflected in present stems in other languages, e.g. Grk *φέρω*, Lat *ferō* ‘I bear’; (ii) the grade **o* reflected in the second principal part in classes 1–5 is found in the singular of the perfect in other languages: thus, for example, beside Grk *λείπω* ‘I leave’, reflecting the PIE root **leyp-* in the present stem, the perfect is *λέλοιπα* ‘I have left’, PIE root **-loyp-*; (iii) the reduced grade found in the third principal part in classes 1–3 is reconstructed for PIE throughout the paradigm of the thematic asigmatic aorist and everywhere outside of the singular for the perfect, which is the situation encountered in Sanskrit. Forms of the Gmc verb using the stem of the third principal part in classes 1–3 show signs of being an amalgam of perfect and aorist forms: the endings reflect PIE aorist endings, whilst the accentual alternations required to produce the consonant alternations under Verner’s Law in at least some of these classes are those of the PIE perfect, see §6.42. The conflation of perfect and aorist forms perhaps stems in part from the appearance of the reduced grade in both categories, an identity that would have been enhanced by loss in Gmc of the other PIE categorial markers, the augment (initial **e-*) in the aorist and the initial reduplicative syllable in the perfect. That separate aorist and perfect forms remained in use past the PGmc period is suggested by the observation that the 2sg.pret. in East and North Gmc is to be derived from

a PIE perfect, whilst that in WGmc reflects an aorist form, see §6.8n4. As for the long vowel in the third principal part in classes 4–5, this perhaps derives in part from the class of PIE athematic asigmatic aorists, cf. Grk $\tilde{\epsilon}$ - $\sigma\tau\eta$ - ν , Sanskrit *a-sthā-m* ‘I stood’; it is paralleled in Lat perfects like *vēni* ‘I came’, *sēdi* ‘I sat’, etc.,¹ but see the discussion in §6.34; (iv) the reduced grade found in the fourth principal part of verbs of classes 1–6 is what is found in PIE verbal adjectives in **-to-* and **-no-*, the latter of which represents the origin of the *-n-* that marks the past participles of Gmc strong verbs: cf. Grk *κλυ-τός* ‘renowned’, related to the verb *κλύω* ‘I hear’, and Sanskrit *anna-* ‘food’ < **ad-na-*, to the verb root *ad-* ‘eat’.

¹ See the discussion in Prokosch (1939: §57).

6.36 Even in classes 1–5, not all strong verbs form the first principal part on the basis of the PIE ablaut grade **e*, for a number reflect the PIE reduced grade, e.g. *brūcan* ‘enjoy’ for expected **brēocan* in class 2, *murnan* ‘mourn’ for expected **meornan* < **mernan* in class 3.¹ These are the so-called aorist presents.² Examples are to be found in several strong verb classes; the relevant verbs are identified below in the individual discussion of each strong class, §§6.44, 6.48, 6.52, 6.59, 6.72. In addition to reduced grade in the root, relevant verbs show the effects of Verner’s Law (Hogg 1992b: §§4.4–5), due to accent on the theme vowel in PIE, see n2.

¹ *Murnan* correctly shows the reflex of the PIE reduced grade **m̥rn-*, whilst *brūcan* shows a long vowel for an expected short. The reason is disputed, but Prokosch (1939: §55; so also Hogg, 1992c: 153) argues that the long vowel in the first principal part of verbs of class 1 (and the long diphthong in corresponding full-grade forms of verbs of class 2, might it be added?) served as a model for analogical lengthening. Campbell (1977: §736(b)) seems to envisage replacement of **ēo* (rather than **u*) by *ū*, on the proportion Gmc **ī ~ *ai* (class 1) : **ū ~ *au* (class 2).

² Sometimes referred to as the *tudāti* type (Sanskrit *tudāti* ‘strikes’). ‘Aorist’ here refers to aspect rather than tense: theoretically, a present stem might be either durative in aspect, and thus formed with full grade of the root, or momentary (i.e., aorist), and thus formed with reduced grade of the root and accent on the thematic vowel, as with *tudāti*. Accordingly, we find side by side durative **gerbb-* in OE *ceorfan* ‘carve’ and aorist **gr̥bb-* in Grk *γράφω* ‘I write’. In Gmc, the more frequently used of the two present stems was generalized, though which of the two was more frequent varied from verb to verb according to its semantics. This is the usual explanation. Cf., however, Bammesberger (1984b), who argues that the *tudāti* type represents an innovation in both Indic and Germanic. He suggests that the reduced-grade roots originated in the *nt*-participle of athematic verbs and spread because of the similarity of the *nt*-formations to the pres.3pl. of thematic verbs. To the contrary, Mailhammer (2006: 8–13; 2007: 117–38) argues that the co-occurrence of stems with reduced and full grade in Gmc indicates that the latter are re-formations of the former, which must then have been rather commoner in PGmc. Learned but unconvincing is the analysis of Vine (1985).

(b) Variant stem types

(i) Weak presents

6.37 The suffix **-yo-* (> Gmc **-ja-*) could be added to a verbal or nominal root in PIE to form a present verb stem.. The result in WGmc is *i*-umlaut of the root vowel (or raising of *e* to *i* in PGmc, Hogg, 1992b: §3.6), as in OE *wēpan* ‘weep’, cf. the noun *wōp* ‘cry’, and *biddan* ‘pray’, cf. *gēbed* ‘prayer’. In addition, if **-ja-* followed a light syllable, it would cause gemination of a stem-final consonant other than */r/*. Thus, for example, a WGmc infinitive of a verb of class 6 was **xav-j-an*, producing OE *hebban* ‘lift’, with gemination and umlaut, though the other principal parts (*hōf*, *hōfon*, *hafen*) are the normal ones expected of verbs of class 6, since the **-ja-* suffix was attached only to the present stem. Because Gmc **-ja-* is formally identical to the causative suffix used to form weak verbs of the first class, strong verbs bearing this suffix are inflected in the present the same way weak verbs of the first class are, see §6.80. They are therefore referred to as strong verbs with weak presents. The present tense of *hebban* was inflected as follows in LWS:^{1,2}

	Indicative	Subjunctive	Imperative
Sg. 1	hebbe	hebbe	
2	hef(e)st	hebbe	hefe
3	hef(e)ð	hebbe	
Pl.	hebbað	hebben	hebbað
Infinitive		hebban	
Pres.part.		hebbende	

Verbs with weak presents are best attested in classes 5–6, though they originally appeared much more widely. The relevant verbs are identified below in the individual discussion of each strong class, §§6.55, 6.63, 6.65, 6.67, 6.74.

¹ Not all forms are attested, but parallels in other verb paradigms leave no doubt.

² On the historical development of paradigms like this, see §6.82.

(ii) Contracted verbs

6.38 Since [h], the lenition of [x], was lost between voiced sounds in Pre-OE, see Hogg (1992b: §§7.45–51), verb stems ending in [x] were subject to this loss. After a loss between vowels, vowel contraction (hiatus resolution) occurred, and verbs in which this development took place are generally referred to as contract(ed) verbs or *verba contracta*.¹ In such verbs, [x] perhaps originally occurred only in the stems of the first and second principal parts, due to the effects of Verner’s Law, see §6.42, and intervocalically (i.e., in leniting position) only in forms of the present stem. Thus, although there is contraction in, for example, *flēon* < **flēohan* ‘flee’, the other principal

parts show no contraction: *flēah*, *flugon*, *flagen*. The following are representative EWS paradigms of the present stems of the verbs *wrēon* ‘cover’ (class 1), *sēon* ‘see’ (class 5), *slēan* ‘strike’ (class 6), *fōn* ‘take’ (class 7):

Indicative				
Sg. 1	wrēo	sēo	slēa	fō
2	wrīehst	siehst	slihst	fēhst
3	wrīehð	siehð	slihð	fēhð
Pl.	wrēoð	sēoð	slēað	fōð
Subjunctive				
Sg.	wrēo	sēo	slēa	fō
Pl.	wrēon	sēon	slēan	fōn
Imperative				
Sg.	wrēoh	seoh	sleah	fōh
Pl.	wrēoð	sēoð	slēað	fōð
Infinitive				
	wrēon	sēon	slēan	fōn
Present participle				
	wrēonde	sēonde	slēande	fōnde

The differences in inflexion amongst these four examples are due to differences in ablaut patterns amongst the verb classes. The particulars are discussed, and the relevant verbs listed, below in the individual discussion of each strong class, §§6.45, 6.49, 6.53, 6.62, 6.66, 6.73. Note that in WS there is no contraction in the pres.ind.2&3sg., where instead *h* is preserved, for disputed reasons, see Hogg (1992b: §7.51), and cf. Fulk (2010b).

¹ On vowel contraction, see Hogg (1992b: §§5.131–49), with the qualification offered in §3.26n1 of the present volume.

6.39 The paradigms in §6.38 may be derived from WGmc paradigms of the following types:

Indicative				
Sg. 1	*wrīxō	*sexwō	*slaxō	*fāxō
2	*wrīxis	*sixwis	*slaxist	*fāxis
3	*wrīxiþ	*sixwiþ	*slaxiþ	*fāxiþ
Pl. 3	*wrīxanþ	*sexwanþ	*slaxanþ	*fāxanþ
Subjunctive				
Sg. 3	*wrīxē	*sexwē	*slaxē	*fāxē
Pl. 3	*wrīxēn	*sexwēn	*slaxēn	*fāxēn

	Imperative			
Sg.	*wrīx	*sex	*slax	*fāx
Pl.	*wrīxanþ	*sexwanþ	*slaxanþ	*fāxanþ
	Infinitive			
	*wrīxan	*sexwan	*slaxan	*fāxan
	Present participle			
	*wrīxandī	*sexwandī	*slaxandī	*fāxandī

Most of the forms in the paradigms in §6.38 develop as expected out of these WGmc forms, with the adjustments explained in §§6.9ff. The diphthong in forms like *slēan* < WGmc **slaxan* poses some difficulty, but it would appear that breaking of **æ* to **ea* in Pre-OE **sleaxan* antedates restoration of *a*, see Hogg (1992b: §5.38), and cf. Fulk (2010b).¹

¹ It must not be supposed instead that /x/ was lenited and lost before the restoration of *a*, since the latter is an early development, antedating initial palatalization, whilst the loss of [h] is a late development, see Hogg (1992b: §§7.50–1).

6.40 In Angl, where there was no syncope in the pres.ind.2&3sg., there is instead generally loss of *h* and vowel contraction, e.g. PsGl(A) *gesīst*, *gesīð* ‘see(s)’, though in contracted verbs there is not uncommonly either restoration of the vocalic ending as a separate syllable or sporadic preservation of hiatus upon loss of [h], e.g. PsGl(A) *gesieð* ‘sees’, Li *flīð* ‘flees’, see Hogg (1992b: §5.133). Forms retaining *h* in the pres.ind.2&3sg. occur sporadically in Merc, e.g. PsGl(A) *gefihð*, *gefihþ* ‘exults’ (beside *gefīð*), *onfōeht* ‘accepts’ (beside *onfōēð*), Ru1 *gesihst*, *gesihþ* ‘see(s)’ (beside *sis*, etc.). Conversely, forms of the Anglian type occur in a small number of instances in Kt OccGl 49 beside the WS type, thus *forsīoð* ‘despises’, *aflīð* ‘flees’. Also in Angl there occur pres.ind.1sg. forms in *-m*, thus PsGl(A) *flēom* ‘I flee’, Li *sīum*, *sēom* ‘I see’ (but Li *fōe* ‘I take’). These can only be by analogy to *bēom* ‘I shall be’ and *dōm* ‘I do’, on the basis of the consideration that *bēo-* and *dō-* were plainly analysable as the stems of these.¹

¹ Hence, not by analogy to Angl *eam*, *am* ‘I am’, which can only have been monomorphemic. On this issue, see Hogg (2003: 78–80).

6.41 On contraction in forms of *būan*, without loss of [h], see §6.72. The verb *fēolan* ‘penetrate’, from **feolhan*, shows loss of [h] and compensatory lengthening, see firstly Hogg (1992b: §7.45). The other principal parts, *fealh*, *fulgon*, *folgen*, are comparable to those of contracted verbs, see §6.38. In Angl there is smoothing in the pres.ind.2&3sg. and in the subj. because a front vowel originally followed, see *ibid.*: §5.100. Thus we find

PsGl(A) 68.14 *fēle* subj., DurRitGl *ætfēla* subj., also ind.3sg. PsGl(A) *ætfīleð* < **-fulxiþ*, see *ibid.*: §5.24. There also occur PsGl(A) *ætfēlun* pret.pl. and poetic *befolen* pa.part., as if to a verb of class 4.

(iii) Alternations under Verner's Law

6.42 Verner's Law affects stems with post-nuclear, originally voiceless fricatives, see §§4.4–5. The consonants affected are Gmc */f, θ, s, x/, which render IOE [v, d, r, ɣ]¹ when subject to the law; but the distinction between [f] and [v] eventually was eliminated by the WGmc voicing of [f], see Hogg (1992b: §7.44). In the first three classes of strong verbs, the unaffected consonant remains in the first two principal parts, the affected in the remainder, e.g. *snīðan*, *snāþ*, *snidon*, *sniden* 'cut' and *cēosan*, *cēas*, *curon*, *coren* 'choose'. In the other classes the distribution is not so regular, see §§6.65–6. The effects of Verner's Law are very commonly levelled away, e.g. in the paradigms of *rīsan* 'rise' and *wriðan* 'twist'. A converse regularization of the paradigm is particularly notable in Angl in contracted verbs, where the analogical pressure to extend <g> from principal parts (iii–iv) was strong, e.g. Ru1 *onwriðan* inf., Li *oferwriðað* 'cover' pres.pl.²

¹ Gmc */θ/ when voiced to */ð/ renders WGmc /d/, see Hogg (1992b: §4.17); Gmc. */s/ when voiced to */z/ was subject to rhotacism, see *ibid.*: §4.15–16.

² For a detailed analysis of the inchoate loss of alternations in OE verbs under Verner's Law, see Adamczyk (2004), although in connexion with her conclusions it must be remembered that there is considerable scholarly disagreement about whether the pattern observable in classes 1–3 (non-voicing in principal parts i–ii, voicing in iii–iv) is to be expected in classes 4–7, see e.g. Prokosch (1939: §20d), and cf. Hogg (1975). See below, firstly, §§6.65–6.

(c) *Classes of strong verbs*

(i) Class 1

6.43 The first class of strong verbs evinces an ablaut pattern reflecting a PIE ablauting vowel plus */j/ (> PGmc */i/), see §6.34. It may be exemplified by the principal parts of *stīgan* 'climb':

stīgan stāh stigon stigen

The form *stāh* shows final devoicing, see Hogg (1992b: §7.59ff.). The effects of Verner's Law, see *ibid.*: §§4.4–5, are exemplified by the principal parts of *snīðan* 'cut':

snīðan snāþ snidon sniden

The verbs *līðan* 'travel' and *scrīðan* 'move' show the same effects of Verner's Law,^{1,2} but the consonant of the first two principal parts has been levelled into the others in *mīðan* 'conceal', *rīsan* 'rise', *wriðan* 'twist'. Contracted

verbs in this class also show the effects of Verner's Law, see §6.45. In WS, a verb transferred to this class from class 3 is *frīnan* 'ask', due to the loss of /j/ before dental consonants, see Hogg (1992b: §7.71), hence *frīgnan* > *frīnan*, to which analogical pret.sg. *frān* was then formed; OccGl 50.1.2 77.27 *rān* 'rained' (to weak *rīgnan*) is similarly formed. ÆLS (Eugenia) 2, LS 28 (Neot) 49 *oferswād* 'overpowered' is based on weak *oferswīðan*.

¹ But cf. GuthB 1039 *scriþen*.

² See also §6.44 on **wisan*.

6.44 In WS, back umlaut might be expected in the third principal part of *belīfan* 'remain', *drīfan* 'drive', *scriþan* 'prescribe', but it has been levelled away, whilst back umlaut is common before all consonants but /k, ɣ/ in the third principal part in Angl (and Angl-derived texts), e.g. PsGl(A) *areosun* 'arose', Bede *dreofon* 'drove', *wreoton* 'wrote'. Because of this back mutation it is possible to discern certain aorist presents, see §6.36, thus PsGl(A) *reopað* 'reap', similarly Ru1 *hriopan*, Li *gehrioppa*, *hriop(p)að*, *rioppas*, Ru2 *riopað* 'reap';¹ likewise Li *to grioppannæ*, *gegrioppa* 'grip'. A possible aorist present **wisan* may be reflected in HlGl D1 *forweren*, *Ruin 7 forweorone* pa.part. 'decayed'.² In Angl, weak preterites are sometimes found for *fordwīnan* 'vanish', *grīpan* 'grasp', *hrīnan* 'touch', *stīgan* 'climb', *ætūwītan* 'reproach', mostly in Li.³

¹ Because of the removal of back umlaut, the quantity cannot be determined in WS *rīpan*. ChronE 1089.3 *rēþon* pret.pl. is as to a verb of class 5, inf. **repan*, which would result if **reopan* with back umlaut simplified the diphthong to *e* rather than *i*.

² See Brunner (1965: §382A3), but note that we are unable to authenticate a form *toweosende* cited there, the basis for the assumption of an aorist present.

³ See Brunner (1965: §382A4) for details.

6.45 Contracted verbs of class 1 mostly have principal parts like those of *wrēon* 'cover':

wrēon wrāh wrigon wrigen

Similar are *lēon* 'grant'¹ and *tēon* 'accuse'; but *asēon* 'sift' has the pa.part. *asiwen*, *aseowen* < **a-sizwan* with PGmc **/ɣw/*, see Hogg (1992b: §4.9(3)). On *þēon* 'prosper' and its purported membership in class 1, see §6.53. Because of the change of *īo* to *ēo* in WS, see *ibid.*: §§5.155ff., and other changes, contracted verbs of strong classes 1 and 2 had the same vocalism in the present. As a consequence, already in EWS there is mixture of the two classes of contracted verbs, with the formation of analogical stems of the other class in principal parts (ii–iv). Thus, in WS, *wrēah*, *wrugon* 'covered' are commoner than *wrāh*, *wrigon*. Similar forms are in evidence for *tēon* 'accuse'.

¹ On the etymology, see Bammesberger (1982a).

6.46 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 1 include (*ge*)*wītan* ‘depart’,¹ *rīsan* ‘rise’, *wrītan* ‘cut, write’, *stīgan* ‘climb’ and their compounds. Other relatively frequent verbs of this class include *bīdan* ‘await’, *bītan* ‘bite’, *blīcan* ‘shine’, *drīfan* ‘drive’, *glīdan* ‘glide’, *gnīdan* ‘grind’, *grīpan* ‘grasp’, *hnīgan* ‘bow’, *hrīnan* ‘touch’, *belīfan* ‘remain’, *līdan* ‘travel’, *mīdan* ‘conceal’, *nīpan* ‘grow dark’, *rīdan* ‘ride’, *rīpan* ‘reap’,² *scīnan* ‘shine’, *scrīfan* ‘prescribe’, *sīgan* ‘sink’, *slīdan* ‘slide’, *slītan* ‘split’, *besmītan* ‘defile’, *snīcan* ‘creep’, *snīdan* ‘cut’, *spīwan* ‘vomit’, *strīcan* ‘stroke’, *strīdan* ‘stride’, *swīcan* ‘desert’, *ætwītan* ‘reproach’, *wlītan* ‘observe’, *wrīdan* ‘flourish’, *wrīdan* ‘twist’ and their compounds; also LWS *frīnan*, see §6.43. Verbs attested less frequently include *čīnan* ‘gape’, *clīfan* ‘cleave’, *ætclīdan* ‘adhere’,³ *cnīdan* ‘beat’, *acwīnan* ‘dwindle away’, *drītan* ‘defecate’, *dwīnan* ‘languish’, *flītan* ‘dispute’, *gīnan* ‘yawn’, *hlīdan* ‘spring up’, *hnītan* ‘thrust’, *hwīnan* ‘whistle’, *mīgan* ‘mix’, *gerīsan* ‘befit’, *scītan* ‘defecate’, *sīcan* ‘sigh’, *toslīfan* ‘split’, *swīfan* ‘revolve’, *hwīnan* ‘lessen’, *hwītan* ‘whittle’, *wīcan* ‘yield’ and possibly **wīsan*, see §6.44, and **fīgan* ‘roast’.⁴

¹ Also amongst the 100 commonest verbs is WS (*w*)*uton*, (*w*)*utan*, *uten* ‘let us’. This apparently is formed with the adhortative suffix discussed in §6.6, added to the stem **wūt-* ‘depart’ shortened under low stress, with combinative back umlaut, see Hogg (1992b: §5.109). Low stress is also responsible for the frequent loss of initial *w-* in this word, and for the loss of final *-n* or *-m* in the cognate OSax *wita*. We are unable to authenticate a form *witon* without back umlaut reported as frequent by Brunner (1965: §114A6).

² See §6.44&n1.

³ Attested in the pres. only.

⁴ Only pa.part. *afīgan*, and so possibly to class 5 instead: see §6.63n4. A verb of class 5 would accord better with the assumption that the root is PIE **pek^w-*.

(ii) Class 2

6.47 The second class of strong verbs evinces an ablaut pattern reflecting a PIE ablauting vowel plus **/w/* (> PGmc **u*), see §6.34. It may be exemplified by the principal parts of *flēogan* ‘fly’:

flēogan	flēah	flugon	flogen
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The form *flēah* shows final devoicing, see Hogg (1992b: §7.59ff.). The effects of Verner’s Law, see *ibid.*: §§4.4–5, are exemplified by the principal parts of *frēosan* ‘freeze’ and *sēoðan* ‘boil’:

frēosan	frēas	fruron	froren
sēoðan	sēaþ	sudon	soden

The verbs *čēosan* ‘choose’, *drēosan* ‘fail’, *hrēosan* ‘fall’ and *forlēosan* ‘lose’ show the same effects of Verner’s Law, but the consonant of the first two

principal parts has been levelled into the others in *abrēoðan* ‘decay’. Contracted verbs in this class also show the effects of Verner’s Law, see §6.49. In Angl there is to be expected smoothing in principal parts (i–ii) when the stem ends in *c*, *g* or *h*, see Hogg (1992b: §§5.93ff.), hence PsGl(A) *belēc* ‘enclosed’ pret.3sg., Li *eftġebēġ* ‘laid back’ pret.3sg., PsGl(A) *ġetēh* ‘draw, constrain’ imper.sg., etc. The smoothed vowel of the pret.sg. may then be extended to principal part (iii), e.g. Li *ġebrēce* ‘use’ pret.subj.sg., *brēcon* pret.pl. The resulting forms resemble pret.pl. forms of verbs of class 5, and this may be the reason that Li not infrequently has *æ* in the pret.sg., just as verbs of class 5 do, e.g. *ġebræc* ‘enjoyed’, *flæh* ‘fled’, *ataeh* ‘drew’. The unsmoothed diphthong of the pret.sg. is also extended in Li *ġecēason* pret.pl., *ġecēase* pret.subj., DurRitGl *ġicēase*. Occasionally *ī* from the earlier encliticized pres.ind.2&3sg. is extended to other forms in Angl,¹ thus PsGl(A) *flīgu* ‘fly’ pres.ind.1sg., PsGl(A), Ru1 *līgende* ‘lying’ pres.part., Ru1 *smīkende* ‘smoking’ pres.part.

¹ For another possible explanation, see Hogg (1992b: §5.97n1).

6.48 Aorist presents to class 2 have *ū* in the first principal part¹ but are otherwise like verbs with *ēo* in the present, e.g. *brūcan*, *brēac*, *brucon*, *brocen*.² The relevant verbs include *brūcan* ‘use’, *būgan* ‘bend’, *dūfan* ‘dive’, *hrūtan* ‘snore’, *lūcan* ‘close’, *lūtan* ‘bow’, *scūfan* ‘shove’,³ *slūpan* ‘glide’, *smūgan* ‘creep’, *strūdan* ‘plunder’, *sūcan* ‘suck’ (alongside *sūgan*), *sūpan* ‘swallow’,⁴ *hūtan* ‘howl’ (alongside *hēotan*). Some further aorist presents are suggested by Rid 3.28 *crýdeþ* ‘hastens’ (cf. PDE *crowd*) and by ME *sprouten* ‘sprout’ (cf. PPs 140.10 *asprotene* pa.part.); possibly also GuthB 856 *scūdende* ‘hurrying’ (?), if this is not to a weak verb *scūdian*, see §6.112.

¹ Rather than *ū*, see §6.36n1.

² The last, for this verb, only at Abbo 105.2. The pa.part *brocen* to class 5 *brecan* ‘break’ usually bears a prefix *to-*, *for-*, *a-* to distinguish it from this.

³ Alongside <*sceofan*>. It cannot be determined for certain whether the latter represents *sceōfan* or *sceofan*, see Hogg (1992b: §5.67). A non-aorist present is reflected in Got *af-skiuban* ‘reject’, Old Swedish *skiuva*, OHG *skioban* ‘shove’; but NSGmc apparently used the aorist present: cf. OFris pres. *skūwa*, Middle Low Ger *schuven*. Cf. ÆGram 137.5 *sceūfe* pres.ind.1sg. and Mart 2.1 De 13, A. 15 *sceufon* pret.pl. On forms like Nbr *ofsćýfende* pres.part., *ascýfað* imper.pl., *ofsćýufon* pret.pl., *ġescýfen* pa.part., see Hogg (1992b: §5.68).

⁴ To Li *ġesēap* pret.3sg. cf. weak *ġesūpedon* pret.pl.

6.49 Contracted verbs of class 2 are *flēon* ‘flee’ and *tēon* ‘draw’:

flēon	flēah	flugon	flogen
tēon	tēah	tugon	togen

Merc has mostly generalized *ēo* where *ēa* would be expected in the paradigm of *flēon*, e.g. PsGl(A) *flēoð* pres.ind.pl., *flēonde* pres.part., although Ru1 occasionally has forms like *flēaþ* pres.ind.pl. Conversely, Nbr generalizes *ēa* where *ēo* might be expected in both verbs. Note also Li *flūð* pres.ind.3sg., DurRitGl *flūi* pres.subj., *flēende* pres.part. Kt forms are unexceptional.¹ Since principal parts (ii–iv) of *flēon* are identical to those of *flēogan* ‘fly’, present forms of the former are sometimes used for the latter in LWS, e.g. *ÆCHom* II, 6 54.70 *flēoð* ‘fly’, rarely the reverse, but cf. Mald 275 *flēogan* ‘flee’. On PsGl(A) *flēom* pres.ind.1sg., see §6.40. As mentioned in §6.45, similarity of form in contracted verbs of classes 1–2 led to analogical creations in both classes. Thus, in class 2 we find the principal parts (ii–iv) *tēah*, *tugon*, *togen* to class 1 *tēon* ‘accuse’, with similar forms for *wrēon* ‘cover’. There occur as well comparable forms for class 3 *þēon* ‘thrive’, see §6.53.

¹ Campbell (1977: §740) regards Ch 1200 (*HarmD* 7) 10 *atēe* as an error. He also cites a Kt *aflīhð* pres.ind.3sg., but this appears to be an error for OccGl 49 *aflīgð* pa.part. (= LWS *aflýged*, to weak *aflýgan* ‘put to flight’).

6.50 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 2 include *bēodan* ‘enjoin’, *cēosan* ‘choose’, *brūcan* ‘enjoy’ and their compounds. In addition to the aorist presents cited above, §6.48, relatively frequent verbs of this class include *brēotan* ‘break’, *brēowan* ‘brew’, *clēofan* ‘split’, *crēopan* ‘creep, crawl’, *drēogan* ‘endure’, *drēosan* ‘fail’, *flēogan* ‘fly’,¹ *flēotan* ‘float’, *frēosan* ‘freeze’, *gēotan* ‘pour’, *grēotan* ‘lament’, *hlēotan* ‘obtain’, *hrēodan* ‘adorn’,² *hrēosan* ‘fall’, *hrēowan* ‘rue’,³ *lēogan* ‘lie’, *forlēosan* ‘lose’, *nēotan* ‘use’, **rēofan* ‘break’,⁴ *rēotan* ‘lament’, *scēotan* ‘shoot’, *þēotan* ‘howl’ and their compounds. Less frequent are forms of *abrēoðan* ‘decay’, *drēopan* ‘drip’, *gēopan* ‘ingest’, *lēodan* ‘grow’, *lēoran* ‘depart’,⁵ **ahnēopan* ‘pluck off’,⁶ *rēocan* ‘smoke’,⁷ *rēodan* ‘redden’,⁸ *smēocan* ‘fumigate’, *aprēotan* ‘weary’; possibly also *snēowan* ‘hasten’⁹ and **cnēodan* ‘assign’.¹⁰

¹ On LWS confusion with *flēon* ‘flee’, see §6.49.

² Attested mostly by the pa.part. *broden*.

³ LWS *hrēow* pret. is best explained by the developments discussed in Hogg (1992b: §7.73).

⁴ Only the pa.part. (*be*)*rofen* is attested, though not rarely.

⁵ Only Angl and poetic, and usually weak, but cf. *Ruin* 7 *gēleorene* pa.part. (for *gēlorene*, rhyming with *forweorone*, see §6.29).

⁶ Preterites GuthB 847 *ahnēop* ‘plucked off’ and Ex 476 *gēnēop* ‘overcame’ correspond to forms with *ēa*, see Hogg (1992b: §5.45), as indicated by the cognate Got *dis-hniupan* ‘rend’.

⁷ Also with a late weak pret. HIGl F873 *rēohte*.

⁸ The vocalism of CorpGl 2 9.401 *onrēod* is explained by Hogg (1992b: §5.45).

⁹ Only And 242, 1668, but cf. And 505, OrW 62 *snōweð* pres.3sg., the latter suggesting a verb of class 7, like ON *snúa* ‘turn’. See further §6.76n19.

¹⁰ Only Bede 2 150.27 *cnēodeð*, but cf. CP 111.3 *cnōdað* pres.ind.pl. and Met 1.32 *ġecnōden*, apparently a verb of class 7.

(iii) Class 3

6.51 The third class of strong verbs evinces an ablaut pattern reflecting a PIE ablauting vowel before two consonants, the first of them usually a sonorant, see §6.34. The original pattern is most closely approximated in stems in which the post-nuclear consonant is not /r/, l, m, n/ or /x/, such as *bręgdan* ‘move quickly’:¹

bręgdan	bręgd	brugdon	brogden
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The ablaut pattern may be altered, however, by the effect of neighbouring consonants on the root vowel. When the consonant immediately after the root vowel is /r/ or /x/, the result is breaking in principal parts (i–ii), as with *beorgan* ‘protect’ and *feohtan* ‘fight’:

beorgan	bearh	burgon	borgen
feohtan	feaht	fuhton	fohten

When the following consonant is //, breaking occurs regularly in principal part (ii), but in principal part (i) only when /x/ originally followed this or between /s/ and //, see Hogg (1992b: §5.22), as exemplified by *helpan* ‘help’, *fēolan* ‘penetrate’² and *aseolcan* ‘weaken’:

helpan	healp	hulpon	holpen
fēolan	fealh	fulgon	folgen
aseolcan	asealc	asulcon	asolcen

After a palatal consonant, in WS the results of palatal diphthongization are in evidence in principal part (i) in verbs in which there was no breaking in the present, as with EWS *ġieldan* ‘pay’:

ġieldan	ġeald	guldon	golden
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The diphthong in principal part (ii) of such verbs, however, is due to breaking, which antecedes palatal diphthongization, see *ibid.*: §7.71. Before a nasal consonant, *e in principal part (i) is raised to *i*, and *u* in principal part (iv) fails to be lowered to *o*, see *ibid.*: §§3.5, 11, as with *bindan* ‘bind’, *swimman* ‘swim’, *singan* ‘sing’:

bindan	band	bundon	bunden
swimman	swam(m)	swummon	swummen
singan	sang	sungon	sungen

In such verbs, naturally principal part (ii) may have *o* in Merc, EWS and eKt, see *ibid.*: §§5.3–6, thus *bond*, *swom(m)*, *song*. Two verbs of this type show metathesis subsequent to the PGmc vowel changes seen in principal parts (i) and (iv), *birnan* ‘burn’ and *irnan* ‘run’:

birnan	barn	burnon	burnen
irnan	arn	urnon	urnen

Again, in Merc, EWS and eKt (also INbr, see *ibid.*: §5.5), principal part (ii) may be *born*, *orn*; in LWS are sometimes found the pret. forms *bearn*, *earn*, formed by analogy to verbs like *beorgan*. Likewise when metathesis occurred later than breaking, the latter is absent, as with *berstan* ‘burst’ and *þerscan* ‘thresh’:

berstan	bærst	burston	borsten
þerscan	þærsc	þurscon	þorscēn

Unmetathesized forms also occur not infrequently, e.g. ChristC 1114 *rinnan*, ChronE 1009.18 *toþræsc*, as well as forms with half-breaking, see Hogg (1992b: §5.26), e.g. EWS *biernan*, *iernan*, Merc *beornan*, *eornan*, Nbr *biorna*, *iorna*, also ChronE 656.67 *ætbeorstan*, MkGl (Li) 14.65 *gēðearsca*.

¹ It might be possible to explain *brugdon*, *brogden* as containing PGmc **ru* < PIE **r̥*, cf. *brocen*, §6.60n1, but *fubton*, *fohten* (and similar forms in the other WGmc languages) can have Gmc *u* only by analogy. There are no verbs of class 3 without (originally) a post-nuclear sonorant attested in East Germanic; cf. ON *bregða*, *bragð*, *brugðum*, *brugðinn*, similarly *bresta* ‘burst’, *gnesta* ‘crash’. It may be that OccGl 70.2 47 *gebregden*, PsGl(A) 82.3 *gebregdenlice*, HomU 19 (BIHom 8) 57 *gebregdnan* reflect older forms of the pa.part., but since *u/o* is found in cognates in North and West Gmc, they may instead be recent analogical formations. At least some of these verbs in class 3 with a post-nuclear consonant other than a sonorant in origin have the structure of verbs of class 5, but with a suffix in the present that was extended to the other forms of the stem. Thus, e.g., to *frignan* cf. *fricgan* ‘ask’ (without the *n*-suffix, but with a weak present); to *feohtan* cf. Grk *πέκω* alongside *πέκτω*, both ‘I shear’.

² From **feolhan*, see §6.41.

6.52 Aorist presents to class 3, on which see §6.36, include *murnan* ‘mourn’,¹ *spurnan* ‘spurn’,¹ and perhaps Lch II (1) 4.6.11 *forcuuolstan* ‘swallow’, though only the inf. is attested. The pa.part. of *murnan* is unattested, and cf. the weak preterites And 37 *murnde*, 154 *bemurndan*. A weak pa.part. to *spurnan* also occurs, GD 1 (C) 9.60.21 *unforspurnedum*, and the verb regularly inflects according to the second weak class in Nbr. Beside inf. *spurnan* there is found occasionally *spornan* and pres.part. *onspornendum*, see Hogg (1992b: §3.10); and beside pa.part. *spurnen* is found rare *-spornen*.

¹ There is no ***meornan* or ***speornan*, despite Bosworth and Toller (1898: (be-)meornan, (æt-, ġe-, on-)speornan).

6.53 There is one contracted verb of class 3, with the principal parts *þēon* (<**þīhan* < **þinxan*), *þāh* (< **þanx*), *þungon*, *þungen* ‘prosper’, originally like *bindan* before the PGmc loss of [ŋ] before /x/, see Hogg (1992b: §3.13). It is usually said that this is no longer a verb of class 3 but has gone over to class 1 (and class 2, see §6.49), with new analogically formed principal parts (iii–iv) *þigon*, *þigen*.¹ In fact, ***þigon* is unattested in the *DOEC*, and *þigen* just once in EWS CP 389.24 *ġeðġigene* (alongside 213.7 *ðungen*), whilst *þungon* and *þungen* are the usual forms, though these are not as common in LWS as the analogical forms *þugon*, *þogen* belonging to class 2, see §6.49. Beside pret.sg. *þāh* there occurs <þeah> several times, probably also to class 2 (i.e. *þēah*), though possibly to be explained as due to confusion of the preterites of this verb and of *þicġan* ‘partake’ (class 5, hence *þēah* < **þæh*), since the latter conversely adopts the pret. *þāh* in verse beside etymological *þeah*.²

¹ See, e.g., Campbell (1977: §739) and Brunner (1965: §383).

² See Fulk, Bjork and Niles (2009: cxlvii&n3), with references.

6.54 The contracted verb *þēon* excepted, in this class the effects of Verner’s Law, see Hogg (1992b: §§4.4–5), are evident only in *weorðan*, *wearþ*, *wurdon*, *worden* ‘become’. Rarely and only in late texts is *d* replaced by *þ/ð*, e.g. *ÆLet4* (SigewardB) 313 *wurðon*, LS 29 (Nicholas) 174 *ġeworðen*. Instances like Nic (C) 2 *ġeward* pret.sg. are probably errors, as scribes often fail to cross the upstroke of <ð>, e.g. at Beo 1837, 2959, 3119.

6.55 There is one verb in this class with a possible weak present, see §6.37, EWS **ġierran* ‘chatter, make a noise’, as suggested by AldV 13.1 4337 *ġyrran*, *ÆGram* 214.14 *ġyrrre* pres.ind.1sg. and And 374 *gurron* pret.pl.

6.56 Many Angl forms differ from WS ones in predictable ways, e.g. Nbr *worda* ‘become’, with retraction of **/e/*, see Hogg (1992b: §5.30), pret.3.sg. *ward* with retraction of **/æ/*, see *ibid.*: §5.29, Ru2 *ofġeorf* ‘cut off’ pret.1sg., with <eo> for <ea>, see *ibid.*: §5.44(1). On Bede 4 360.29 *ġewarden* ‘become’ pa.part., see *ibid.*: §5.34. In Nbr there are some innovative pret. forms, including strong pl. *ongannon*¹ and several weak forms, such as *strugde*, *astræġde*, *su(o)elte*, *ġesuindingdon*, *ġeðringdon*, parts. *ġesuincġed*, *ġeðringed*.

¹ But the pl. form LkGl(Ru) 17.27 ***drincon* in the edition of Skeat 1871–87 is in error: the ms. plainly has *druncon* (as the *DOEC* text has it), as may be seen in the facsimile (Liuzza and Doane, 1995: Oxford, Bodl. Libr., MS. Auct. D.2. 19, fol. 11r, gloss line 10).

6.57 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 3 include *weorðan* ‘become, be’, *be-*, *onginnan* ‘begin’, *drincan* ‘drink’, *limpan* ‘occur’, *singan* ‘sing’, *findan* ‘find’, *irnan* ‘run’, *feohtan* ‘fight’ and their compounds. The known verbs of this class, categorized by type, and not differentiating amongst compounds of the same root, are these:

- (a) Like *bregðan* ‘move quickly’^{1,2} are the following: *berstan* ‘burst’³, *frignan* ‘ask’^{4,5,6}, *stregðan* ‘strew’^{2,7}, *þerscan* ‘thresh’.²
- (b) Like *beorgan* and *feohtan* are the following:⁸ *beorcan* ‘bark’, *ceorfan* ‘cut’, **ceorran* ‘creak’⁹, **acweorran* ‘gorge’¹⁰, *deorfan* ‘labour’, **fleobtan* ‘web’¹¹, *hweorfan* ‘turn’, *sceorfan* ‘scrape’, *sceorpan* ‘scrape’, **smeortan* ‘hurt’¹², **sneorcan* ‘shrivel’¹³, *steorfan* ‘die’, *sweorcan* ‘grow dark’, *sweorfan* ‘wipe’, *weorpan* ‘cast’¹⁴, *weorðan* ‘become’.^{14,15} On *fēolan* ‘penetrate’, see §6.41; on *aseolcan* ‘weaken’, see §6.51.
- (c) Like *helpan* are the following: *belgan* ‘enrage’, *bellan* ‘bellow’, *delfan* ‘dig’, *melcan* ‘milk’, *meltan* ‘melt’, *swelgan* ‘swallow’, *swellan* ‘swell’, *sweltan* ‘die’, *beteldan* ‘cover’.
- (d) Like *gieldan* are the following (in EWS spelling): *giellan* ‘yell’, *gielpān* ‘boast’, **sciellan* ‘resound’.¹⁶
- (e) Like *bindan* are the following: *birnan*, *brinnan* ‘burn’, *climban*, *climman* ‘climb’, *clingan* ‘cohere’, *crimman* ‘insert’, *cringan*, *crincan* ‘succumb’, *acwincan* ‘vanish’, *drincan* ‘drink’, *findan* ‘find’¹⁷, *be-*, *onginnan* ‘begin’, *grimman* ‘rage’, *grindan* ‘grind’, *hlimman* ‘roar’, *(h)rimpan* ‘twist’, *hrindan* ‘thrust’, *irnan*, *rinnan* ‘run’, *limpan* ‘occur’, *linnan* ‘cease’, *sćrimman* ‘shrink’, *sćrincan*, *sćringan* ‘shrink’, *sincan* ‘sink’, *singan* ‘sing’, *sinnan* ‘contemplate’, *slincan* ‘creep’, *spinman* ‘spin’, *springan* ‘leap’, **sprintan* ‘eructate’¹⁸, *stincan* ‘emit an odour’, *stingan* ‘stab’, *swimman* ‘swim’, *swincan* ‘strive’, *swindan* ‘diminish’, *swingan* ‘beat’¹⁹, *þindan* ‘swell’, *þringan* ‘press’, *þrintan* ‘swell’²⁰, *windan* ‘wind’, *winnan* ‘labour’, *wringan* ‘wring’. The verb *bringan* ‘bring’, though it has a strong present (cf. weak *brenġan*), has no strong preterite, see §6.100n16, only poetic pa.part. *brungen*, comparable to some strong forms found in OHG, see Braune (1987: §336A4).

¹ The verb *bregðan* has both strong and weak forms in the present in WS, hence EWS strong 3.sg. *britt*, with umlaut, beside ÆCHom II, 6 53.20 *ætbrëtt*.

² Due to loss of anteconsonantal /j/, see Hogg (1992b: §7.71), beside forms with <g> we find WS *brēdan*, *bræd*, *strēdan*, with analogical loss of /j/ in *brūdon*, *brōden*, *bestrōden*.

³ On forms of *berstan* and *þerscan* with half-breaking or without metathesis, see §6.51.

⁴ The reason for the change of *e to i in *frignan* is not known for certain (cf. Got *frāihnan*, OSax *fregnan*; and pres. *fregn-* is the rule in Nbr): it may be that this verb has a weak present or that it has been influenced by *friġgan* ‘ask’, two possibilities

suggested by Brunner (1965: §389A3). But it may instead have to do with the nasal consonant, since *u* is not lowered to *o* in the pa.part. Yet /n/ exerts no influence on [æ] in pret.sg. *fræġn*, never **fragn*.

⁵ In WS, with the loss of anteclassical /j/, see Hogg (1992b: §7.71), the resulting *frīnan* prompted transferral to class 1, with the formation of pret.sg. *frān*, rarely pret.pl. *-frīnon*. Also with the loss of /j/, by analogy loss of /ɣ/ could apply to principal parts (iii–iv), hence pret.pl. *frūnon*, pa.part. *ġefrūnen*.

⁶ The *n* in the stem of *frīnan* is in origin a present-forming suffix, see §6.51n1, which has been extended throughout the paradigm. It may be, however, that MtGl(Ru) 12.10 *frugan* pret.pl., if not an error with omission of titulus for *n*, is a relic of the older form, though pa.parts. like *ġefrīgen*, *ġefregen* are rather to *frīcġan* (class 5). In the DOEC we find no form corresponding to the pa.part. *ġefrugen* cited by Brunner (1965: §389A3).

⁷ The verb *streġdan* is regularly weak in WS.

⁸ There probably was no verb **seorðan* ‘defile’, as Li *serð* imper.sg. may be explained as a borrowing of ON *serða*, see Jordan (1907: 36).

⁹ Only MCharm 2.9 *curran* pret.pl.

¹⁰ Only *acworren* pa.part., in Psalter glosses.

¹¹ Only in Lch II (1) 36.1.21 *flohtenfōte* pa.part. + adj. ‘web-footed’.

¹² Only Or 1 25.20 *fýrsmeortendum* pres.part.

¹³ Only PsGl(A) *ġesnerc* pret., with smoothing.

¹⁴ On LWS forms with *u* (infs. *wurpan*, *wurðan*), see Hogg (1992b: §5.184).

¹⁵ Showing the effects of Verner’s Law, see §6.42.

¹⁶ Attested only in the pres., e.g. AldV 7.1 269 *onscīlp*.

¹⁷ In both Early and Late WS the pret.sg. is *funde*, *fundest*, i.e. with weak inflexions on the strong stem. Both strong and weak forms occur in verse, and there is some evidence that weak forms may have been used in Merc, as well, see Fulk (1992: §355(9)).

¹⁸ Only Li *ġisprant* pret.sg.

¹⁹ A pa.part. *sunġen* is found alongside normal *swunġen*, with *w* restored.

²⁰ But Rid 45.5 *brindende* pres.part. There is also a pa.part. Lch II *apru̅ten* which, because it is twice thus spelt in the text, may not be an error (with omitted titulus standing for *n*) but a form of a verb of class 7 **brūtan*, cf. ON *brūtinn* ‘swollen’, see §6.72.

(iv) Class 4

6.58 The fourth class of strong verbs evinces an ablaut pattern reflecting a PIE ablauting vowel plus a single sonorant, see §6.34. The same PIE **e* : **o* : **∅* ablaut alternation as is reflected in classes 1–3 underlies the stem alternations in class 4, except that the vowel of principal part (iii) is WS *æ*, non-WS *ē*, see §6.34&n3. The stem alternations may be exemplified by the principal parts of *beran* ‘bear’:

beran	bær	bæron	boren ¹
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One verb shows the effect of a following nasal consonant upon the ablauting vowel, *niman* ‘take’:²

niman	nam, nōm	nōmon, nāmon	numen
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In principal part (i) of *niman*, **e* is raised to *i*, and in principal part (iv), *u* fails to be lowered to *o*, see Hogg (1992b: §§3.5, 3.11), just as with *bindan* and similar verbs in class 3. In principal part (iii), Gmc */æ:/ develops to /o:/ before the nasal consonant, see *ibid.*: §3.22; no explanation for the alternative form with *ā*, which for the most part does not appear in Angl, is generally accepted.³ In principal part (ii), *nam* is the etymological form, despite Brunner (1965: §390A3) and Campbell (1977: §742n1), as shown by the Gmc cognates Got, ON, OHG, OS, OFris *nam*.⁴ In Angl and EWS⁵ this is regularly *nom*,⁶ but beside this there was a form with a long vowel, as indicated by CorpGl 2 9.174 *fornoom*, with *noom* also found in ME (beside *nam*, *næm*).⁷ Doubtless *nōm* is influenced by the plural,⁸ but the long vowel is quite exceptional in the sg.; it may be that the model of *ō* throughout the preterite of verbs of class 6 is the cause, see Brunner (1965: §390A3), also Gough (1973), and particularly Bammesberger (1979: 426–7). Perhaps like *niman* is **striman* ‘resist’, attested only as a present participle in the early Merc glossaries; but the form may instead be **strīman*, either belonging to class 1 or (less likely) a weak verb.

¹ In the pa.part. of verbs of this class, *o* is explained by some as reflecting schwa secundum, see §6.34nn2, 5, which is normally thought to develop to a full-grade vowel, but which in proximity to a sonorant instead develops to PGmc **u*. Whether or not schwa secundum is a plausible reconstruction, it should be assumed that the root had reduced grade rather than expected zero grade by analogy, on the basis of the regularity that the stem is not reduced to non-syllabicity in the pa.part. in other verb classes. See Prokosch (1939: §59).

² For proposed etymologies, see Szemerényi (1989: 359–68), Lindeman (2003). Because *niman* is the only indisputable example in OE of the raising of **e* to *i* before single *m*, Gough (1973) proposes that *niman* is by analogy to verbs of class 3. It is true that ON *nema* (with some comparable forms to be found in WGmc) supports Gough’s position, but the effect of single *m* upon a preceding *u*, at least, is indisputable, see Hogg (1992b: §3.11), so that the phonological explanation is not implausible.

³ But cf. EpGl 155 *naamun*, incidentally confirming the length of the vowel. Fladieck (1930a: 287–8) suggests analogy to a form like *gēafon* in class 5 when it was at the supposed stage **zābun* (see, earlier, Karstien 1926–7), whilst Daunt (1930: 71) suggests instead variant preterites in class 5 like *lāgon*, *wāgon*, *þāgon* as a model, see §6.61, or levelling of *a* from the sg., with lengthening, a possibility entertained also by Fladieck (1930a: 288). A possibility that does not seem to have been entertained is that after original **ā* was in the course of development to *ō*, **ā* was restored by analogy to verbs of both classes 4 and 5, and this later *ā* developed to *ā* before *m*. In ON there co-occur pret.3pl. *nāmu*, *nōmu*, though for different reasons.

⁴ Such also is the view of Gough (1973). Why Brunner and Campbell should have held such a view as the opposing one is puzzling. Bammesberger (1979: 425–6) suggests that it is due to reliance on a statement by Sweet in which, however, *nam* appears to be an error for *cam*.

⁵ But also EWS *be-*, *ge-nam* (CP, Or, ChronA), despite Campbell (1977: §742n1).

⁶ See Hogg (1992b: §§5.3ff.). The ME *Ormulum* in the North-East Midlands has *namm*, with a short vowel, but this is probably a borrowing of the ON pret. *nam*, cf. §6.59n4.

⁷ We are unable to locate an example of LWS <nom> or <genom> that is not likely to be due to Anglian origins of or influence on the text in which it appears (there are no such forms in Ælfric), and so such spellings must not be regarded as evidence for vowel length.

⁸ Similarly in Modern Icelandic, the pret.pl. stem *kóm-* has replaced ON sg. *kom* ‘came’.

6.59 One verb with aorist present is attested in class 4:

cuman cōm cōmon cumen

The PIE root is **g^wem-*, giving in reduced grade PGmc **kum-*.¹ Principal parts (i) and (iv) are thus regularly developed for a verb with aorist present. The pret. forms in Angl, excluding Ru2, and in poetry are usually *cwōm*, *cwōmon*,² also normal in ChronA (*cuōm*, *cuōmon*).³ Pret.pl. *cwōmon* properly reflects the PGmc form, but in the sg. the long vowel is unexpected; the length of the vowel is confirmed, however, by spellings with <oo> in CP and Bede.⁴ In Angl, umlaut is often retained in the pres.ind.2&3sg., whence it has spread to other forms of the present, thus pres.ind.1sg. *cymo*, pl. *cymað*, imper. *cym*, pres.part. *cymende*, beside forms with *u*. Umlaut is also found in alternative forms of the pres.subj. *cyme(n)* and pa.part. *cymen* in Angl, but such forms also occur in EWS, and this suggests a phonological basis for the umlaut rather than an analogical one.⁵

¹ The full grade is reflected in non-aorist Got *qiman*, OHG *queman*. The distinction, presumably, originally expressed the difference between the action of coming (durative, full grade) and the result of coming (aorist, reduced grade), see §6.36n2, both of which meanings are expressed by the one verb in OE.

² But PsGl(A) *forecōmun* (2x), *bicōmun*, Ru1 *cōmun*.

³ The high frequency of this word appears to have contributed to this loss of *w* between a consonant and *ō*, a development that is not otherwise regular in WS. Analogical pressure may also have played a role: loss of *w* somewhat regularizes the paradigm, since *ō* is less anomalous than *wō* as a pret. ablaut variant.

⁴ The same analogical lengthening has occurred in *nōm* ‘took’, see §6.58n3 for possible reasons; cf. also *ǣt* ‘ate’, §6.34&n3. Orm’s *comm* is probably a borrowing of ON *kom*.

⁵ On the possible cause of umlaut in the pa.part., see §6.29. Sievers (1882: 81–3) explains the present subjunctive of this verb as derived from an athematic optative, hence with PGmc opt. suffix **-j-* instead of **-ai-*. Indeed, an athematic optative is to be expected to an aorist present. See further Bammesberger (1982b).

6.60 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 4 include *cuman* ‘come’, *niman* ‘take’, *beran* ‘bear’ and their compounds. Other relatively frequent verbs of this class include *brecan* ‘break’,¹ *cwelan* ‘die’, *helan* ‘conceal’, EWS *scieran* ‘cut’, *stelan* ‘steal’, *teran* ‘tear’ and their compounds. Less common are **dwelan* ‘err’,² **hlecan* ‘cohere’,³ **hwelan* ‘roar’,⁴ **pweran* ‘churn’⁵ and their compounds.

¹ In pa.part. PGmc **brukanaþ* > OE *brocen*, **ru* may represent an alternative development of PIE **r* (which usually produces PGmc **ur*) motivated by avoidance of paradigm allomorphy in the shape of the stem, see e.g. Mailhammer (2007: 68). Alternatively, **u* may reflect schwa secundum, see §6.34nn2, 5.

² Only pa.part. *gedwolen*, though this is not infrequent.

³ Only CP 47.361.20 *blecað* pres.ind.pl. and PrudGl 1.707 *toblocene* pa.part. The vowel *o* for expected *e* in the latter may be explained the same way as that in *brocen*, see n1.

⁴ Only And 495 *hwileð*, ClGI 3.1904 *onhwileð*; cf. *hwelung* ‘noise’.

⁵ The pa.part. is attested in glossaries as *geþworen*; the part. <geþuren> ‘forged’ in poetry is probably in error for *geþrūen*, and thus is to a different verb: see Fulk, Bjork and Niles (2009: 197 note to 1285b), with references.

(v) Class 5

6.61 The fifth class of strong verbs evinces the same ablaut pattern as is found in class 4, except that the vowel of the pa.part. is *e* rather than *o*, as may be exemplified by the principal parts of *metan* ‘measure’:

metan mæt mæton meten

The reason for the difference is that the post-nuclear consonant is not a sonorant, and PIE reduced grade in the pa.part. is thus realized as *e* rather than PGmc **u*, see §6.34&nn2, 5. In the pret.pl., restoration of *ā* is common before /y/ in WS, hence *lāgon* ‘lay’, *þāgon* ‘partook’, *wāgon* ‘carried’, see Hogg (1992b: §§5.39–40), but with <e> in Angl. In WS, palatal diphthongization of the root vowel is evident in all the principal parts of EWS *giefan* ‘give’:

giefan geaf gēafon giefen

Similar are *begietan* ‘acquire’, *ongietan* ‘perceive’. Palatal diphthongization is also evident in Nbr *forgeaf* ‘forgave’, *ongeat* ‘acquired’, beside undiphthongized *forgeaf*, *ongæt*. Outside of WS, where palatal diphthongization does not apply there may instead be back mutation in present forms, e.g. PsGl(A) *ongeotan* inf., Li *ongeattas* pres.2pl. The effects of Verner’s Law, see *ibid.*: §§4.4–5, are evident in *cweðan* ‘say’:

cweðan cwæþ cwædon cweden

Alternations under Verner’s Law are also to be found in *wesan*, the suppletive form of *bēon* that originally belonged to this class, see §6.146:

wesan wæs wæron

Otherwise, Verner’s Law affects only contracted verbs in this class, see §6.62.

6.62 Contracted verbs of class 5 include *sēon* ‘see’, *ġefēon* ‘rejoice’, *plēon* ‘risk’, with the following attested principal parts:

sēon	seah	sāwon	sewen ¹
ġefēon	ġefeah	ġefægon	
plēon	pleah		

For the inflexion, see §6.38. *Ġefēon* is an Angl verb (cf. weak WS *fæġnian* ‘rejoice’), hence usually with pret.pl. *ġefēgon*, but in poetry and other Saxonized texts <æ> may be substituted for <e> in the pret.pl.² Pret. *sāwon* and pa.part. *sewen* are WS forms, to which correspond Angl *sēgun*, *ġeseġen* and similar forms.³ WS *sāwon* shows restoration of *ā*, see Hogg (1992b: §5.39); the form *sægon*, with substitution of WS <æ> for Angl <e>, is found mostly in poetry and in LWS texts with Anglian connexions, e.g. ChronE; cf. also Ru1 *ġesægon*, -*un* (4×) and *ġesāgun* (3×) beside usual (*ġe*)*sēgun*. Pa.part. *ġesāwen* (or *ġesāwen?*), too, presumably with <a> by analogy to the pret.pl., occurs sometimes in Wulfstan and in WS texts with Angl connexions, including GD and Bede. In the present stem, contraction with a back vowel generally results in Angl *ēa*, e.g. inf. *sēa(n)*, but Ru1 *sēon*, see *ibid.*: §§5.136ff. Contraction with a front vowel in Angl gives *ē*, sometimes restored to *ēe*, e.g. PsGl(A), Ru1, Li *ġesēende* pres.part, but there is great variety in the spellings, including <eo, io, ie, ia>, etc. Nbr has pres.ind.1sg. *ġisīom*, *ġesēom*, as if to an athematic verb, see §6.40. In Ru1, Ru2 and Li, the adj. *ġesēne* ‘visible’, see *ibid.*: §5.124, is not infrequently employed as a pa.part., alongside *ġeseġen*; but Li *ġesēene* is more likely an analogical formation based on the pres. stem *ġesē-*: cf. *befōen*, §6.73.

¹ Note that there is no breaking of /e/ before /w/ here, and see §3.45n2.

² More commonly Nbr has weak *ġifēaga* and similar forms, see §6.116.

³ The principal parts in PGmc may be reconstructed as **sexwanan*, **saxw*, **sæzwwn*, **sezwanaz*, and we might expect **/yww/* to have been reduced to */y/* in the pret.pl. but */w/* in the pa.part., see Hogg (1992b: §4.9(3)). WS then generalized the one consonant, Angl the other. As for the first two principal parts, final */xw/* was reduced to */x/* in PGmc, see Hirt (1931: 115), and medial */xw/* was reduced to */x/* in NWGmc, see Krahe and Meid (1969: I, §60).

6.63 Several verbs of class 5 exhibit weak presents, see §6.37, as exemplified by *biddan* ‘ask’:

biddan	bæd	bædon	beden
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In the present, such verbs are inflected like weak *fremman*, see §6.80, otherwise like strong verbs. Other verbs in this class with weak presents include *sittan* ‘sit’, *liġgan* ‘lie’,¹ *þiġgan* ‘partake’,² *friġgan* ‘ask’,³ and possibly

**aficgan* ‘fry’.⁴ In Nbr and Ru1 there are examples of <e> in principal part (ii), e.g. <bed>, <set>, though whether this represents /e:/ borrowed from the plural or /e/ from the pa.part. cannot be determined.

¹ WS has pres.ind.3sg. *-lið*, see Hogg (1992b: §7.70).

² Beside pret.sg. *þeah*, with breaking, there occurs in poetry *þāh*, see §6.53. In WS, however, the verb is usually weak, with pret. *þig(e)de*, pa.part. *þiged*, but cf. CorpGl 2 4.340 *adeġen* ‘surfeited’ pa.part.

³ Only in poetry. The pret. is unattested, but cf. pa.part. *ġefrigen*, *ġefræġen*, *ġefreġen*.

⁴ Only EpGl 272, CorpGl 2 6.325 *afigaen*, ErfGl 1 416, ClGl 1 2516 *afigen*, glossing Lat *frixum*: see Hogg (1992b: §6.2n4). This would, however, be the only Gmc reflex of the PIE root **pek^w*-, seen in Lat *coctus*, Grk *πεπτός*. For this reason, Bammesberger (1998a) favours the assumption that the original glossator misunderstood the Latin to mean ‘sifted’ and wrote <asigaen>, corrupted by a later copyist. Cf. §6.46n4.

6.64 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 5 include *cweðan* ‘say’, *sprecan* ‘speak’,¹ *biddan* ‘ask’, *sittan* ‘sit’, LWS *ġyfan* ‘give’, *etan* ‘eat’ (with its derivative *fretan* ‘eat’),² *licġan* ‘recline’ and their compounds. Other common verbs belonging to this class include *cnedan* ‘knead’, *drepan* ‘kill’,³ *lesan* ‘collect’, *ġenesan* ‘elude’, *screpan* ‘scrape’, *swefan* ‘sleep’, *tredan* ‘tread’,⁴ *wefan* ‘weave’, *wegan* ‘carry’, *wrecan* ‘drive’ and their compounds. Less common are *ġefetan* ‘fall’, *plegan* ‘move rapidly’,⁵ **forrepan* ‘take’.⁶

¹ Cf. alternative form *specan* found in WS and Kt.

² Cf. Got *fra-itan* ‘consume’. *Fretan* is used of animals, not usually of humans. Both *etan* and *fretan* have WS *æ* in the second principal part. This is an old development, cf. Got pret. *frēt*, perhaps developed on the basis of analogy to the plural, perhaps due to contraction of reduplicated **e-ed-* in the PIE perfect (cf. Lat *ēdī* ‘I ate’): see Prokosch (1939: 172n6), Szemerényi (1996: 9.4.3(b)). MkGl(Li) 2.16 *æt* may be an analogical re-formation; cf. LkGl(Ru) 4.2 *ġieet* (where <ee> = *ē*).

³ But Beo 2981 *dropen* pa.part., as if to class 4, beside usual *drepen*.

⁴ On difficulties in the etymology, see Hamp (1974).

⁵ With occasional strong forms in principal part (i), e.g. Ælfric *ic plege*, *plegende*, *to plegenme*, otherwise only weak forms *plegian*, **plagian*, see §6.130.

⁶ Only Li *forrepen* pa.part.

(vi) Class 6

6.65 The sixth class of strong verbs evinces an ablaut pattern unlike that in any other verb class, as may be exemplified by the principal parts of *faran* ‘go’:

faran fōr fōron faren

On the much-debated origins of this ablaut pattern, see §6.34 and the references therein. In the pres.ind.2&3sg. of verbs of class 6, *æ* for expected *e* is very common, e.g. WS *færst*, *færð*; also inf. *stæppan* ‘step’ (weak pres.).

The cause of this is contested, see Hogg (1992b: §5.80(2)). On *a* in variation with *æ* in the pa.part., see *ibid.*: §5.37(5). One verb of this class has an *n*-infix in the present, on which see §6.3, which is extended analogically to the pa.part. as well. This is *standan* ‘stand’:

standan stōd stōdon standen

Another verb has an *n*-suffix in the present only, on which see §6.3. This is *wæcnan* ‘awake’, pret. *wōc*, *wōcon*, to which only a weak pa.part. *wæcned* is attested.¹ Contracted verbs excepted, the effects of Verner’s Law, see *ibid.*: §§4.4–5, are evident only in verbs with weak presents, EWS *hliehhan* ‘laugh’ and *sceþþan* ‘injure’:

hliehhan hlōg, hlōh hlōgon
sceþþan sc(e)ōd sc(e)ōdon sceaðen²

To *hliehhan* no pa.part. is attested. The pret.sg. *hlōh*, *hlōg* is ambiguous as regards the effects of Verner’s Law, due to the devoicing of final fricatives and analogical (orthographic) restoration of voiced ones, see *ibid.*: §§7.59ff., but in *sceþþan* the pattern is plainly quite different from that found in OE classes 1–5, with Gmc voicing in principal parts (ii–iii). There are reasons to believe that *sceþþan* reflects the original distribution of variants rather than a disruption of a pattern like that found in OE classes 1–3.³ On weak presents in class 6, see further §6.67.

¹ Or 3 11.78.10 *awæcnedon* pret.pl. may be to weak *awæcnian*, see Hogg (1992b: §6.64). Brunner (1965: §392A2) cites a pret. *wæcnede*, but there are no examples in the *DOEC*.

² Only GenA 869, with palatal diphthongization of **æ*.

³ See Prokosch (1939: §63) for discussion, and see §6.66 below as regards pret. *slōg*.

6.66 Contracted verbs of class 6 are like *slēan* ‘strike’:

slēan slōg, slōh slōgon slagen

On the inflexion, see §6.38. Apparently (-)slōg is the earlier form of the pret.1&3sg., predominating in EWS and in Angl, replaced by (-)slōh in Ælfric. By contrast, *flēag* (class 2), for example, does not occur in EWS, where *flēah* is frequent. This confirms that the distribution of alternants under Verner’s Law is not the same in class 6 as in classes 1–3.¹ Like *slēan* are *flēan* ‘flay’, *lēan* ‘blame’, *þwēan* ‘wash’.² Umlauted forms of the pa.part. also occur, see §6.29, and forms with *æ*, e.g. *sleġen*, *slæġen*. PsGl(A) generally has *-ē-* where EWS has *-ieh-*, but imperative in *-æh*, whilst other

Angl texts for the most part have $\bar{æ}$, less frequently \bar{a} , throughout the present, and \bar{a} even in the imperative.

¹ Cf. Hogg (1975). The incidence of *stāg* (class 1) in EWS and Angl, with an etymologically voiced fricative, is similar.

² Pa.part. *apwogen* is normal in Ælfric.

6.67 Verbs of class 6 with weak presents, see §6.37, are *hebban* ‘raise’, *hliehhan* ‘laugh’, *sceþþan* ‘injure’, *scieppan* ‘form’, *stæppan* ‘step’, *swerian* ‘swear’. Their principal parts in EWS, insofar as they are attested, are these:

hebban ¹	hōf	hōfon	hafen ²
hliehhan ^{3,4}	hlōh, hlōg	hlōgon	
sceþþan ^{3,5}	sċ(e)ōd	sċ(e)ōdon	sceaðen
scieppan	sċ(e)ōp	sċ(e)ōpon	sċ(e)apen
stæppan ⁶	stōp	stōpon	
swerian	swōr	swōron	sworen ⁷

Such verbs are inflected in the present like weak *fremman* but like *nerian* in the case of *swerian*, see §6.80, otherwise like strong verbs.

¹ On /bb/ in the inf., see Hogg (1992b: §§4.3, 4.13). In LWS are also found weak pret. *hefde* and pa.part. *-hefed-* in *upahefednyss* ‘exultation’ (beside *upahafennyss*); cf. also OrW 89 *ahefed*.

² Li has also umlauted *ahefen*, see §6.29, as well as analogical *ahofen* (1×); cf. also HyGl 3 62.6 *upahofene*, presumably influenced by the pret., and thus perhaps with \bar{o} , but cf. *sworen*.

³ On the operation of Verner’s Law in *hliehhan* and *sceþþan*, see §6.65. On the failure of palatal diphthongization in inf. *sceþþan*, see Hogg (1992b: §5.50n2).

⁴ Angl has inf. *hlæhan*, pres.ind.pl. *hlæhað*, etc., with simplification of *-hh-* (since *-hh-* and *-h-* did not contrast after the loss of intervocalic [h]) and lack of umlaut, perhaps due to the analogy of Angl *hlæhtor* ‘laughter’ (Campbell, 1977: §200.3n1). Poetry has expected Angl *hlehhan*.

⁵ Cf. strong pres. PPs 90.9 *sceaðeð*; in addition, And 1147 †*sceaðan* (emended to *sceððan* in the text employed by the DOEC) may be regarded as a strong inf. There also occurs a weak *-sceded-* pret. and pa.part. in Beo and in non-Ælfrician LWS.

⁶ On $\bar{æ}$ for *e* in *stæppan*, see §6.65.

⁷ Expected *-swaren* is found only in LawIne 35.1. The root vowel of *forsworen* is metrically short in Beo 804. There also occurs a rare weak pret. *swerede*, *sweredan*.

6.68 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 6 include *sēon* ‘see’, *standan* ‘stand’, *faran* ‘go’, *scýppan* ‘create’, *slēan* ‘strike’, *hebban* ‘raise’ and their compounds. Other verbs belonging to this class, in addition to those cited in §§6.65–7, are *acan* ‘ache’,¹ *alan* ‘grow’, *bacan* ‘bake’, *calan* ‘grow cool’, *dragan* ‘drag’, *galan*

‘chant’, *gnagan* ‘gnaw’, *grafan* ‘dig’, *hladan* ‘lade’, *sacan* ‘dispute’, *sc(e)acan* ‘move rapidly’,² *sc(e)afan* ‘shave’, *spanan* ‘persuade’,³ *wadan* ‘advance’, *wæscan* ‘wash’.⁴ Poorly attested are *clawan* ‘claw’,⁵ **dafan* ‘suit’,⁶ **þracan*.⁷ In addition, *weaxan* ‘grow’, which normally belongs to class 7, has a pret. *awōx*, *wōxon* to class 6 in Nbr and in Rid 10.3, and it is not improbable that the verb belonged originally to class 6.⁸

¹ Attested in the pres. only.

² PsGl(A) *scæcende* pres.part., *-scæcen* pa.part.

³ EWS only in this form. In LWS it has gone over to class 7, see §6.76n12. Not attested in Angl.

⁴ Also *wascan*, *waxan*, see Hogg (1992b: §5.36). There is found twice in *ÆHomM* 2 a pret. *wēosc*, apparently a transfer to class 7. Similarly, Brunner (1965: §392A5) reports a pret.pl. *wēoscan* in mss. of the OE Bede.

⁵ Present forms only, e.g. *ÆGram* 170.11 *clawe* pres.ind.1sg.

⁶ Only *gedafen*, *gedæfen* pa.part.

⁷ Only AntGl 2.146 *geþracen* ‘hardy’.

⁸ As argued by Flasdieck (1936: 343). Cf. Got *wahsjan*, a verb of class 6 with weak pres.

(vii) Class 7

6.69 The stems of verbs of class 7 are rather diverse in structure and vocalism. What defines the class as a category is that the verbs originally formed the pret. with an initial reduplicative syllable, with or without ablaut alternation of the root vowel. Reduplication amounts to prefixation of the root syllable with a copy of the initial consonant or, in some cases, consonant cluster,¹ followed, at least in PGmc, by */e/. Reduplication was normal in the formation of the perfect in PIE, see §6.32. This method of preterite formation is preserved well in Gothic, where we find, for example, the principal parts *grētan*, *gaigrōt*, *gaigrōtun*, *grētans* ‘weep’ and *ga-staldan*, *ga-staistald*, *ga-staistaldun*, *ga-staldans* ‘possess’, where *ai* = [e]. To judge by the relic reduplicated forms found in NWGmc languages, see §6.71, stress fell on the reduplicative syllable in the preterite,² and with the increasing loss of unstressed syllables in NWGmc, coupled with the effects of Verner’s Law (which were largely levelled away in Gothic), formation of the preterite must have come to seem excessively irregular. As a consequence, reduplication as an active process of stem formation was abandoned in NWGmc, with retention of only a few relics in OE, OHG and ON to show that it ever existed.³ Instead, in OE the preterite of verbs of class 7 is formed with *ēo* (usually Nbr *ēa*, Kt *īo*) or *ē* in the root.

¹ In Got the rule is that /st/ and /sk/ are the only clusters that reduplicate entire. Cf. the alliterative treatment of these clusters in OE poetry.

² The reduplicative syllable may have been unstressed in Gothic, although this is doubtful, see Jasanoff (2007: 262–3), and cf. Mottausch (1994: 134), with references. But the arguments of Hill (2004: 276–81) for a similar situation in NWGmc are implausible.

³ On the OHG and ON reduplicated forms, see van Coetsem (1990: 72, 97).

6.70 There is widespread disagreement about how the preterite in class 7 was formed in NWGmc.¹ Perhaps the likeliest explanation is the following, which, whether or not it is correct, provides a remarkably accurate method of predicting the preterite stem from the present stem, thus remedying the problem of unpredictability observed by Hogg (1992c: 157).² Reduplicating verbs without an initial consonant originally formed the preterite with the bare addition of /e/ before the root vowel: cf. Got *áukan* ‘add’, pret. *áiáuk*, probably [eɔ:k]. With such verbs as a model, to form the preterite in NWGmc, /e/ was infix in the present stem immediately before the root vowel. Thus, e.g., pres. **fall-* ‘fall’ formed its preterite stem as **f-e-all-*, and pres. **lēt-* ‘let’ as **l-e-ēt-*. In OE the resulting vocalism of the pret. stem is *ēo* if the root contained a back vowel or back diphthong in NWGmc but *ē* if it contained a front vowel or front diphthong.³ Hence, with OE *ēo*: **b-e-aut* > OE *bēot* ‘beat’; **f-e-all* > OE *fēoll* ‘fell’; **sp-e-ann* > OE *spēonn* ‘joined’; **bl-e-ōt* > OE *blēot* ‘sacrifice’; **fl-e-ōw* > *flēow* ‘flowed’. With OE *ē*: **h-e-aít* > OE *hēt* ‘commanded’; **l-e-ēt* > OE *lēt* ‘let’; **kn-e-ēw* > OE *cnēw* ‘knew’.⁴ Nearly the only preterites that undeniably are not correctly predicted by this analysis are *fēng* ‘took’ and *hēng* ‘hung’;⁵ but it is unsurprising that they are exceptions, since these preterites are not formed on the basis of the present stems, which are inf. *fōn* and *hōn*. These inf. derive from **fanxanan*, **xanxanan*, which, however, had already reached the stage */fā:ɣan/, */xā:ɣan/ in late PGmc, see Hogg (1992b: §3.13), and so formation of the pret. by infixation would have conflicted with the transparency of the relation between, e.g., pret. *fēng* and noun *fang* ‘plunder’. Another anomaly of *fēng* and *hēng* is that the NWGmc cognate preterites had both short and long vowels.⁶ That it is the altered structure of the present stem that prevents preterite formation by the normal method in NWGmc is confirmed by poetic *gēong* ‘went’, pret. to *gangan*, which is formed normally in NWGmc as **z-e-ang*.

¹ See, e.g., van Coetsem (1990), Kortlandt (1991).

² For details, see Fulk (1987). This explanation is now the commonest for the purely ablauting preterites of NWGmc: see, e.g., Kortlandt (1991), d’Alquen (1997), Mottausch (1998b), Adamczyk (2002). Cf. the criticisms of Jasanoff (2007: 250–2). The chief alternative to this analysis is to suppose that forms like WS *hēt* and *lēt* are the phonological reflexes of reduplicated forms, as was once the most prevalent analysis, and as is still the view of Vennemann (1997). The chief drawback to such analyses is that they require unparalleled deletion of medial consonants, e.g. in **he-3laup-a* > *hlēop* ‘leapt’. For criticisms of Vennemann’s hypothesis, see d’Alquen (1997), who demonstrates that the claim that such consonant losses truly could be phonologically conditioned is difficult to credit, and in greater detail Jasanoff (2007: 252–60), whose own hypothesis, however, shares Vennemann’s aim of preserving the idea that the seemingly unreduplicated forms of NWGmc can be explained convincingly as the reflexes of reduplicated forms from the middle of which consonant clusters have been removed, albeit chiefly on a morphological rather than a phonological basis in Jasanoff’s view.

³ The vowel \bar{e} in such preterites is said to reflect PGmc $*\bar{e}_2$, an innovation in Gmc, as opposed to $*\bar{e}_1$ (= PGmc $*\bar{a}$, from PIE $*\bar{e}$), since the latter should be reflected as \bar{a} in WS. See Krahe and Meid (1969: I, §31) and, with references, Knapp (1974) and Hilmarsson (1991).

⁴ Preterites like *cnēw* are more commonly spelt with $\bar{e}o$ than with \bar{e} , and Campbell (1977: §745) and Brunner (1965: §396) regard $\bar{e}o$ as original. But \bar{e} must be the earlier form, since spellings like *cnēw* are not infrequent in all dialects, though they are perhaps less probative in Nbr, where even original $\bar{e}ow$ may be spelt <ew>, thus LkGl(Li) 8.26 *gēbrēwun* ‘rowed’, MtGl(Li) 27.24 *spēua* pret.subj. ‘succeeded’ (though these appear to be the only secure examples), see Hogg (1992b: §§5.44–5). (Cognates are indecisive, but OSax *ōbar-sēu* ‘sowed’, inf. *sāian*, cf. OE *sē(o)w* alongside inf. *sāwan*, suggests a non-diphthongal interpretation, contra Jasanoff 2007: 279, since $\bar{e}u$ does not otherwise appear as preterite vocalism in this class in OSax, whilst \bar{e} does.) The /w/ in such forms is in fact a NSGmc development: to OE *sāwan* ‘sow’, cf. Got *saian*, OHG *sān*. (The argument of Matzel 1987: 183–6 that the strong forms of these ‘verba pura’ are late analogical re-formations of weak verbs is wholly implausible.) Unless breaking of /e:/ before /w/ is assumed, see *ibid.*: §§5.23 (and cf. §3.45n2), which seems unlikely given how often spellings like OE *cnēw* occur, it may be best to explain forms like *cnēow*, *cnēowon* as having developed much the way nouns like *cnēow*, *cnēowes* did, see §2.32, though with an original long vowel. On Nbr spellings with \bar{a} , see Hogg (1992b: §§5.44–5).

⁵ It should be assumed that *swēop* ‘swept’ is analogical, since all other verbs with NWGmc $*ai$ in the root (*hātan*, *lācan*, etc. §6.76(vi)) have \bar{e} in the pret. The only other exception is *gēblond*, †*gēblondan* to *blandan*, see §6.76n10.

⁶ The quantities in OE cannot actually be determined for the early period; by the later period lengthening had set in, see Hogg (1992b: §5.202). On quantities in the cognates, see Flasdieck (1936: 288ff.), d’Alquen (1997: 88–9).

6.71 Certain relics of the older system of reduplicative preterite formation are preserved in OE poetry, in the Anglian dialects, and in WS almost exclusively in those texts that show decided Anglian influence, such as Bede and the Blickling Homilies. The plainest and most frequent examples are these:

- (i) *ondreord* to *ondrædan* ‘dread’,¹ found in PsGl(A), Ru1, Li, Ru2;
- (ii) *hēht* to *hātan* ‘command’;² found in poetry, the Vercelli and Blickling Homilies, LS 3 (Chad), GD, Bede, some Mercian charters (223, 1432, 1437, 1441), ChronA 688.3, Mart 3, 4, PsGl(A), Ru1, Li, Ru2, DurRitGl, Inscr4 (the Alfred Jewel, which also contains Angl *meč*);
- (iii) *leolc* to *lācan* ‘toss’, found in poetry and Bo 15.29 *liolcen*;
- (iv) *leort* to *lētan* ‘let’, found in El 1104, Bede, Ch 218 (HarmD 12), PsGl(A), Ru1, Li, Ru2, DurRitGl, LorGl 1;
- (v) *reord* to *rædan* ‘advise’, found in El 1022, Bede, Ru1.

More commonly are found the non-reduplicated preterites *ondrēd*, *hēt*, etc., which, however, do not appear in Nbr or PsGl(A), whilst Ru1 has usually *lēt*, once *forleortun*. Although reduplicated preterites in Gothic reflect only full-grade forms, it is necessary to assume that the full grade has been generalized in that language, and, originally, full grade alternated

with reduced grade in the pret., as in classes 1–5. Otherwise it would be difficult to explain how a form like **re-rēd-unþ* could have been reduced to *reordon* in OE.³ Most of these preterites show breaking of the vowel /e/ of the original reduplicative syllable (with Angl smoothing in *hēht*), though *eo* in *leolc* is most likely by analogy to other reduplicated forms, since breaking would be unusual before /l/, see Hogg (1992b: §5.22).⁴ In *leort* there is dissimilation of /l/ to /r/ (i.e., original **leolt*) under the influence of the preceding /l/.⁵ Some other possible reduplicated forms are Nbr *speoft*, *speaft*, seemingly to *spātan* ‘spit’, and pl. *beafton*, *beoftun*, seemingly to *bēatan* ‘beat’ (and cf. northern ME pret. and pp. *befit* in *Cursor Mundi*). These might have developed from PIE **spept-*⁶ and **bhehht-*, which might be expected to give PGmc **speft* and **beft-*, in which event the broken vowels must be regarded as analogical to forms like *reord*.⁷ Not generally credited as a reduplicated form is JnGl(Li) 20.22 *blefla* ‘blew’ pret.3sg. (beside *geblēouu*, an alternative gloss in the same place), to *blāwan*, but the form is not implausible as the reflex of PIE **bh(l)ebhlē* with **-w* added in NSGmc (with either full reduplication of **bhl-* or later analogical insertion of /l/ on the basis of inf. *blāwan*): see d’Alquen (1997: 85).^{8,9}

¹ In origin, *ondrēdan* is a compound of *rēdan*, but by metanalysis the unstressed prefix *ond-* has been re-identified as *on-*, as indicated by poetry, in which the verb alliterates on *d* rather than *r*: see Bammesberger (1977b), with references. Campbell (1977: §746; see, with a similar view, Jasanoff, 2007: 245) reconstructs reduplicated **on-dredrd*, with subsequent loss of post-nuclear *d* on the basis of dissimilation; but surely, etymologically, *ondreord* is simply the reduplicated pret. of *rēdan* with the prefix *ond-* added.

² According to Campbell (1977: §736 (j)), uncertainty about the quantity of the root vowel derives from the assumption of possible analogical influence from unreduplicated pret. *hēt*, on the basis of certain unspecified ME evidence, to which he provides no reference. We note that in *Lažamon*, where <æ> does not generally stand for the reflex of OE short /e/, the word is sometimes spelt <hæht>, <hæhten>.

³ Thus, Bammesberger (1986b: 62–3), supported by Mottausch (1998b: 55), reconstructs **rerde* perf.2pl. < PIE **re-rH-té* alongside **rerōþa* 2sg. < **re-rōH-*. Note that **H* is usually, if not always, lost in Gmc unstressed syllables, as in OE *dohtor*, deriving ultimately from PIE **dhughHtē(r)*, cf. Grk *θυγάτηρ*, and on the loss of **H*, see Bennett (1978), Fulk (1988). A form like OE *hēht* must then be explained as analogical for **behit*.

⁴ Alternatively, since *leolc* should have been smoothed in Angl, Brunner (1965: §394A1) argues that in **lelāk-* there was back mutation before syncope of *ā*. But back mutation is rather a late development, and so it would be surprising if it were followed by syncope.

⁵ This particular dissimilation is of a rather common sort: cf., e.g., change of Lat *-al-* as in *vitālis*, *pedālis* to *-ar-* in *familiāris*, *militāris*, etc.

⁶ With dissimilation from **spespt-*, see Szemerényi (1996: §9.4.1.2).

⁷ See Schulze (1921), with references.

⁸ Alternatively, Ross (1937: 135–6) would reconstruct a form with a trimoric vowel, **bleblōo* in our notation, see Hogg (1992b: §§6.27&n1) and §2.6n2 in the present volume, due to contraction of the stem-final vowel with the PIE aorist ending, and this would also result in OE *blefla*.

⁹ Sievers (1901) analysed *blefla* as an error (influenced by the Lat *insuflavit* that it glosses) corrected by the following gloss *† ġeblēouuu*, and in this he has been followed by most, e.g. Flasdieck (1936: 301–2). But *†* is habitually used in OE glosses not for corrections but for alternative glosses; all it proves is that *blefla* seemed to at least one scribe a form that some might not understand. If *blefla* is not a reduplicated form, it is so unlike anything that could plausibly be a preterite of ‘to blow’ that it is hard to understand how a scribe could have written it. Sievers was especially conservative as regards the analysis of reduplicative forms, e.g. rejecting *speoft*, *speaft*, see Sievers (1884: 279). Bammesberger (1977a: 1–2) perceives the faults of Sievers’s explanation but still finds that the form *blefla*, though it can be explained straightforwardly on a phonological basis, is too anomalous to credit as an inherited form, since if it were so it would surely have been re-formed or removed analogically.

6.72 Possibly, defective *būan* ‘settle’ is to be regarded as an aorist present in class 7, if it is derived from PGmc. **bū-* < PIE **bhūH-*, cf. Grk *φύω* ‘I grow’, Lat *fuī* ‘I have been’.^{1,2} But more commonly the verb is reconstructed as PGmc **bōwanan*, from the same root, see e.g. Orel (2003: 52–3), or weak **bōwēnan*. The same uncertainty attends the derivation of **þrūan* ‘forge’, on which see §6.60n5. But **aprūtan* ‘swell’ may belong here,³ if not to class 2, see §6.57n20.

¹ The only undeniably strong forms in OE are pa.part. *ġebūn*, *bȳn-*, on which see Hogg (1992b: §§5.132) and §6.29 in the present volume. The pret. is weak *būde*, etc., and the lack of umlaut does not prove the strong origin of the word, since the Gothic cognate *bauan* is of the third weak class, see §6.130n2, though some strong forms also occur in Gothic.

² Derivation from **bū-* is, e.g., the analysis of Krahe and Meid (1969: I, §64).

³ Only pa.part. *aprūten* in Lch II (2×).

6.73 Contracted verbs of class 7 are *fōn* ‘take’ and *hōn* ‘hang’:

fōn	fēng	fēngon	fangen
hōn	hēng	hēngon	hangen

On the derivation of these, see §6.70. It is impossible to be certain about the quantity of the vowel in the pret.: WGmc cognates are attested with both long and short vowels.¹ In Nbr, and for the most part in Ru1, in the present system uncontracted endings are added to the stem *fō-* to form disyllables, e.g. 3sg. *onfōeð*, inf. *fōa*, but imperative *fōh*. In PsGl(A), on the other hand, a spelling such as <foeð> probably represents monosyllabic *-fæð*, since there is no pl. ***fōað*, inf. ***fōan*, etc., though 1sg. *onfōu* occurs once alongside *onfō* (also <onfoo> once). There occurs in ChristC 1157 *bi-fēn* pa.part., in which the poetic metre shows *-fēn* to be monosyllabic, on which see §6.155n2. This is probably not the same formation as Li *befōen*, which appears to be a disyllabic innovation based on the present stem; cf. *ġesēen*, §6.62.

¹ See, e.g., Braune (1987: §350A7) for OHG, Holthausen (1921: §448) for OSax. On the quantities, see Flasdieck (1936: 288–90).

6.74 One verb with weak present occurs in class 7, *wēpan*, *wēop*, *wēopon*, *wōpen* ‘weep’, which is inflected like weak *fēran* in the present, see §6.80.¹ Where WS has *ē*, Anglian generally has <oe>.

¹ A weak pret. occurs once, LkGl(Li) 7.32 *wāpde*.

6.75 The stems of a number of verbs of class 7 are used also to form weak verbs of the first class, with umlaut in principal part (i), including Nbr *bȳa* ‘settle’, *genȳan* ‘go’ in poetry and Anglian-influenced LWS, *rādan* ‘advise’,¹ CP 55.427.18 *sāwan* ‘sow’, *spātan* ‘spit’ (already EWS). Weak preterites, not necessarily marked by umlaut, are also not uncommon, especially in Nbr, including Li *ġesāudes(d)* ‘sowed’ *tosceāded* (*tosceādadan*, etc.) ‘distinguished’, *slēpde* (*ġeslēpedon*, with other weak forms in all dialects) ‘slept’, *ġespeoftad* (to *spātan*, see §6.71) ‘spat’; also non-Ælfrician WS *ondrēdde* ‘feared’.

¹ Not in Angl, except Li *rēded* pa.part.

6.76 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, verbs of class 7 include *hātan* ‘command, promise, be called’, *fōn* ‘take’, *healdan* ‘hold’, *lātan* ‘let’, *cnāwan* ‘know’, *feallan* ‘fall’, *ondrēdan* ‘dread’. The known verbs of this class may be categorized according to their root vocalism in earlier stages of Gmc:

- (i) with NSGmc **ā* before **w*, see Hogg (1992b: §5.21): *blāwan* ‘blow’, *cnāwan* ‘know’, *crāwan* ‘crow’, *māwan* ‘mow’, *ġerāwan* ‘divide’, *sāwan* ‘sow’,¹ *brāwan* ‘curl’, *wāwan* ‘blow’, all with preterites in *ē*, later *ēo*;²
- (ii) with NSGmc **ā* before other consonants: *ondrēdan* ‘dread’, *lātan* ‘let’, *rādan* ‘advise’, *slēpan* ‘sleep’,³ perhaps also **ahwātan* ‘drive away’,⁴ all with preterites in *ē*;
- (iii) with NWGmc **a* in breaking environments:⁵ *fealdan* ‘fold’, *feallan* ‘fall’, *healdan* ‘hold’, **stealdan* ‘possess’,⁶ *wealcan* ‘roll’, *wealdan* ‘rule’, *weaxan* ‘grow’,⁷ with preterites in *ēo*;
- (iv) with NWGmc **a* before nasal consonant:⁸ *bannan* ‘summon’,⁹ *blandan* ‘mingle’,¹⁰ *gangan* ‘go’,¹¹ *spannan* ‘join’,¹² probably not **blangan* ‘anger’,¹³ all but *blandan* with preterites in *ēo*;
- (v) with NWGmc **/ā:/*, from early PGmc **/anx/*, see *ibid.*: §§3.13–15: *fōn* ‘take’, *hōn* ‘hang’, see §6.70;¹⁴
- (vi) with NWGmc **ai*: *hātan* ‘command’, *lācan* ‘toss’, *scādan* ‘distinguish’,¹⁵ *spātan* ‘spit’,¹⁶ *swāpan* ‘sweep’, generally with preterites in *ē*, though

- swāpan* has pret. *swēop*, presumably on an analogical basis (see §6.70n5);
- (vii) with NWGmc **au*: *bēatan* ‘beat’, *hēawan* ‘hew’, *hlēapan* ‘leap’, with preterites in *ēo*. A few other verbs with NWGmc. **au* are attested only fragmentarily: pa.parts. *ēacen* ‘increased’, *ēaden* ‘granted’, and prets. *dēog* ‘(was) concealed’,¹⁷ *hēof* ‘lamented’;¹⁸
- (viii) with NWGmc **ō*: *blōtan* ‘sacrifice’, *blōwan* ‘bloom’, *cnōdan* ‘assign’,¹⁹ *flōcan* ‘clap’,²⁰ *flōwan* ‘flow’, *hlōwan* ‘low’, *hrōpan* ‘yell’, *hwōpan* ‘threaten’, **hwōsan* ‘cough’,²¹ *rōwan* ‘row’,²² *snōwan* ‘hasten’,¹⁹ *spōwan* ‘succeed’, *swōgan* ‘roar’,^{20,23} *wēpan* ‘weep’ (weak pres., §6.74), *wrōtan* ‘uproot’;²⁰ possibly also the prets. GuthB 847 *ahnēop* ‘plucked off’, Ex 475 *genēop* ‘overcame’, if these are not to a stem of class 2, see §6.50n6;
- (ix) with NWGmc **ū*, see §6.72.

¹ In CP also inf. *sēwan* and pres.subj. *sēwe*, perhaps influenced by the pres.ind.2&3sg.

² See §6.70n4.

³ Also *slāpan* by restoration of *ā*, see Hogg (1992b: §§5.35ff.). Non-WS forms have *ē* as the root vowel, see *ibid.*: §3.24&n1. A weak pret. *slēpte* occurs in Ru1 and in non-Ælfrician WS.

⁴ Only GenB 406 *abwēt* pret.sg., see Smithers (1952: 80–5).

⁵ Such verbs lack breaking in Angl, due either to restoration of *a* or to smoothing.

⁶ Pret. only, emended Rim 22 *stēold* 1sg. (ms. *steald*).

⁷ On Nbr and poetic *awōx*, *wōxon*, see §6.68&n8.

⁸ Also with <o> rather than <a> in principal parts (i) and (iv) outside LWS and Ikt, see Hogg (1992b: §5.3ff.).

⁹ Jasanoff (2007: 280) cites a pret. *ġeban* that we are unable to authenticate.

¹⁰ Forms like ChristC 1437 *ġeblendon* pret.pl. must be weak if the analysis of preterite formation offered in §6.70 is correct, as strong **blēond-* should thereby be expected. But there do occur two strong preterites, ClG1 3.1848 *ġeblond* and And 33 †*ġeblondan* (the latter emended to *ġeblendan* in the text employed by the *DOEC*). The reference of Flasdieck (1936: 328) to a pret. *ġeblond* in London, British Library, Cotton Vespasian A. iii appears to be in error. If pret. *gang* is analogical to verbs of class 3 (see n11), *ġeblond(an)* may have been formed the same way.

¹¹ A pret. *gang* (3×) appears alongside usual *ġeong*, *ġiong* in Beo, perhaps by analogy to preterites of class 3 like *sang*, *sprang*, although Jasanoff (2007: 280n75) reconstructs a parallel verb **ġingan* of class 3 that he derives from PIE **ġhengh-*. Bavarian *gang* is a recent analogical creation, according to Flasdieck (1936: 328). The palatal initial of the pret. is sometimes extended to the pres., e.g. Nbr *ġeonga* inf., Ru1 *iongaf* pres.pl., Beo 2743 *ġeong* imper. In GenB, *ġieng* (emended from <gien>) and *ġenge* subj.sg. are OSax forms. The pa.part *ġegongen* is replaced by *ġiēad* (cf. WS pret. *ēode* to *gān* ‘go’), Li, Ru2.

¹² WS only, and almost exclusively LWS. EWS *spann-* (as opposed to *span-*) occurs only CP 44.329.22. On EWS *spanan* (class 6), see §6.68. GenB 445 *spenn* pret. is an OSax form.

¹³ Only MtGl(Li) 26.8 *abloncgne* pa.part. The form is probably an error for *abolgne*: see Bammesberger (1978).

¹⁴ These verbs also have pa.part. <foen>, <hoen> in Nbr, poetic *-fēn* (e.g. ChristC 1157), see §6.73.

¹⁵ Beside expected pret. *toscēd* (3×), CP has *a-*, *to-scēād* (3×), perhaps in part as the result of scribal confusion with the noun *tōscēād* ‘discernment’. Anglian weak forms are common, e.g. Li *toscēādade*, *toscēāded*.

¹⁶ Aside from the possible reduplicated pret., §6.71, only MtGl(Li) 27.30 *spātende* pres.part.

¹⁷ Beo 850; see Fulk, Bjork and Niles (2009: 165) for references.

¹⁸ GenB 770 *hōf* is to OSax *biofan*, of class 2. There is also a weak verb WS *hēofan*, pret. *hēofde*, PsGl(A) 34.14, Beo 3142 *biofende* pres.part.; on the vocalism, see Hogg (1992b: §5.84).

¹⁹ Also class 2, see §6.50&nn9–10. Despite the argument of Bammesberger (1976a), metrical considerations render it very unlikely that the root vowel could be short.

²⁰ Pret. unattested.

²¹ Pres.ind.3sg. *hwēst*, pl. *hwōsað* (hence not inf. **hwēsan*, see OED: *wheeze*), pret.3sg. *hwēos*.

²² Beo *rēon* pret.pl. (2×) is explained by Hogg (1992b: §§4.7, 5.131ff.).

²³ There is also a pa.part. <geswogen> ‘overpowered’ that may be to a verb of this class, if it has *ō*.

III Weak verbs

6.77 Weak verbs are mostly derived verbs, i.e. verbs formed by the addition of suffixes to various parts of speech before the inflexional ending. Thus, weak verbs add a suffix in the form of a dental consonant to mark the preterite, instead of marking the preterite by means of ablaut or reduplication, the way strong verbs do. In PGmc there were four classes of weak verbs, differentiated by the suffixes they bore. In OE three weak classes remain recognizable, of which the third is only fragmentarily preserved.¹

¹ For bibliographical references on the origin and development of the weak verbs, see Fullerton (1977), Stark (1982), West (2001).

1 Weak class I

6.78 Class I of weak verbs is by far the largest of all OE verb classes. In Germanic it was quite productive, though by the historical period of OE it had become almost entirely a closed class, since the phonological processes involved in the production of class I forms had grown opaque, see Kastovsky (1996b: 281). The origins of the class are in PIE, where in the present tense the suffix **-y-* + theme vowel + inflexion could be added to both verb and noun stems, which might or might not already bear a theme vowel or other suffix, to form chiefly iterative-intensive or causative verbs, e.g. Lat *specit* ‘observes’ < **spek-y-e-ti* and *monet* ‘warns’ < **mon-ey-e-ti*.¹

This method of stem formation continued to be very productive in Gmc, with **-j-* added to stems drawn from many different parts of speech to form causative verbs, e.g. OE *drenćan* ‘make to drink’, cf. noun *drinć* ‘drink’; *blāćan* ‘bleach’, cf. adj. *blāc* ‘pale’; *cwellan* ‘kill’, cf. verb *cwelan* ‘die’; *ȳtan* ‘drive out’, cf. adv. *ūt(e)* ‘out’. In such forms, roots containing the PIE normal ablaut grade will usually have PIE **o* (PGmc **a*) in the root (unlike, for example, weak presents of strong verbs, §6.34), always of course subject to umlaut before **-j-*, e.g. *settan* ‘set’ < **sat-j-an* < PIE **sod-y-*, cf. strong *sittan* ‘sit’ < PIE **sed-y-*.² But the class was so productive in Gmc that the suffix could be added to a stem containing another ablaut grade, e.g. reduced grade in *cyssan* ‘kiss’ < PGmc **kuss-j-an*.

¹ The PIE suffix **-y-* thus alternated with **-ey-*. On the elimination of the distinction in Gmc, see Kortlandt (1986a).

² On the ablaut relation see, e.g., Eichner (1992).

6.79 In PIE, verbs with the suffix **-y-* formed only present stems, to which no stems in other tenses were in use.¹ The individual IE languages subsequently developed various methods of forming preterites to these verbs. In Gmc the present stem including **-j-* served also for the preterite (where **/j/* would be realized as **[i]* if it occurred between consonants, otherwise as **[j]*), but in the preterite a dental suffix was added to it, usually taking the form **-ǰ-*, but see below. The origin of this dental suffix is disputed,² but today the most widely accepted explanation is that **-ǰ-* + inflexion developed from originally aorist forms of the Gmc verb reflected in PDE as *do*. Thus, for example, OE *hāelde* ‘healed’ 3sg. (inf. *hāelan*) is to be derived from **hail-i-ǰǣþ*, essentially ‘hale-did’.³ It seems a natural enough explanation that preterites to such verbs should have been formed by an obvious periphrasis,⁴ and morphological parallels are not wanting, e.g. the Lat imperfect in *-bā-*, which morpheme reflects an old *ā*-preterite to the verb ‘be’.⁵ And although the phonological and morphological developments required to derive the attested weak preterite endings from aorist forms of ‘do’ are not free of problems, this derivation seems the most plausible offered, since the preterite inflexions of weak verbs are unlike those of strong verbs and cannot be related directly to normal PIE perfect or aorist inflexions.⁶ On the other hand, not all dental preterite forms can be explained on this basis. In particular, some of the very archaic preterite-present verbs (§§6.131ff.) and weak verbs with unumlauted preterites (§6.100&n3) demand reconstructions with PIE **t* in the preterite, perhaps to be derived from aorist forms of the second person.⁷ The origin of the weak preterite must therefore be a matter of polygenesis. As for the past participle, it must derive in the main from the PIE suffix **-t-* reflected in participles like Lat *status* ‘stood’, Grk *κλυτός* ‘heard’. Because such participles had accent on the inflexion, the

Gmc *þ that developed from PIE *t would have been voiced to *ð under Verner's Law, giving WGmc *d*, see Hogg (1992b: §§4.4, 17).

¹ The present here includes the imperfect, which was based on the present stem. Thus, for example, imperfects could be formed to these verbs, but not perfects or aorists, as will seem natural enough when it is understood that many such verbs were formed from noun stems.

² See Prokosch (1939: §66). For references, see Tops (1974) and Rasmussen (1996), the latter with an interesting synthesis of the two chief explanations. For a concise overview of the competing theories, see Pohl (1989: 196–9). Kortlandt (1989) outlines the expected development of a Gmc root-aorist to the verb 'do' in non-initial position.

³ The process is generally assumed to have originated in what were to become weak verbs of class II. Thus, for example, it may be supposed that there arose a periphrasis like **warō ðǣþ* 'did with vigilance' comprising the instrumental of a fem. noun plus root-aorist of 'do', producing, ultimately, OE *warode* 'was vigilant', and after morphologization the now suffixal *-ðǣþ was extended to what were to become the other weak classes. See Lühr (1984: 43–4), and, on the differences amongst East, North and West Gmc in regard to the formation of the dental preterite, Fullerton (1989).

⁴ Just as, for example, the PDE perfect is formed by a periphrasis of 'have' + pa.part.

⁵ See Szemerényi (1996: §9.4.4.1&n18).

⁶ For discussion, see Bammesberger (1986b: 85–6).

⁷ This is the view of Bammesberger (1986b: 69–82). As he points out, derivation from the more obvious possible source, the PIE *t*-suffix found in past participles, faces the difficulty that such participles had suffixal accent, and thus the Gmc /θ/ that developed from this *t*-suffix should have been voiced under Verner's Law, whereas several preterite-present verbs and weak verbs with unumlauted preterite, see §§6.100, 6.131ff., demand reconstruction with a PGmc voiceless consonant. Yet Prokosch (1939: §65d note 1) offers a possible explanation of how the accent could have shifted to the root in participial forms. But Prokosch (1939: §65a) also argues that the newly formed weak preterites of preterite-present verbs have generalized the pres. suffix *-t- reflected in Grk *πέκτω* alongside *πέκω* (see §6.51n1 above), which hardly seems relevant.

(a) *Inflexions*

6.80 The inflexions of weak verbs of class I differ according to the structure of the stem, depending on whether in WGmc it was light or heavy, and further, whether in light stems the final consonant was /r/ or another sound. The three types may be exemplified for WS by *fremman* 'perform', *nerian* 'save' and *fēran* 'depart':

Present Indicative			
Sg. 1	fremme	nerie	fēre
	2	frem(e)st	nerest
	3	frem(e)ð	nerēð
Pl. 3	fremmað	neriað	fērað
Present Subjunctive			
Sg. 3	fremme	nerie	fēre
Pl. 3	fremmen	nerien	fēren

		Imperative	
Sg. 2	freme	nerē	fēr
Pl. 3	fremmað	neriað	fērað
		Preterite Indicative	
Sg. 1	fremede	nerede	fērde
2	fremedon	neredon	fērdon
3	fremede	nerede	fērde
Pl. 3	fremedon	neredon	fērdon
		Preterite Subjunctive	
Sg. 3	fremede	nerede	fērde
Pl. 3	fremeden	nereden	fērden
Infinitive	fremman	nerian	fēran
Infl.inf.	to fremmenne ¹	to gēnerienne ¹	to fērenne ¹
Pres.part.	fremmende	neriende	fērende
Pa.part.	fremed	nered	fēred

It will be seen that wherever *fremman* has a geminate consonant, *i* appears in the paradigm of *nerian*; and in the preterite, whilst *fremman* and *nerian* have *-ed-*, *fēran* has *-d-*. The reasons for these discrepancies are explained in §6.82. We should expect on an etymological basis that *i* in verbs like *nerian* would be non-syllabic, since it represents Gmc **i/j/*, in contradistinction to *i* in verbs of weak class II, see §§6.105–6. The spelling evidence is inconclusive, since *i* in both classes I and II may be spelt <g>, e.g. *nergān* alongside class II *lufgēndra* ‘loving’, *tilgān* ‘cultivate’.² Likewise, spellings like *gēnerige* are not uncommon in WS, see Hogg (1992b: §6.44). Moreover, in LWS there occur preterites like ÆCHom *nerode*, formed according to the second weak class, see §6.88. But non-syllabic spellings in class II like *tilgān* are notably less frequent than spellings like *nergān* in class I, and the evidence of poetic metre, though sparse, is consistent, since verbs with *i* like *nerian* may follow a resolved lift, e.g. El 108, WaldB 17, Mald 179, whilst those of class II containing *i* may not, indicating *i/j* in class I and *i/i* in class II.³ In PsGl(A) there is a regular orthographic difference between verbs like *nergān*, always spelt with <g>, and those of the second weak class like *lufian*, always spelt with <i>. See also §§6.105–6.

¹ In the inflected infinitive, Ælfric generally has *-enne*, whilst EWS prefers *-anne*. See also §6.6n1.

² Most such forms, however, like the latter, are to verbs that may originally have belonged to class III, in which postconsonantal *i/j* may be etymological, see §§6.124, 6.130.

³ On the metrical rule, which originates with Sievers, see, e.g., Fulk (1992: §249). See also Sievers (1893a: §9.2).

6.81 As with the strong verbs, plural verb endings are generally reduced to *-e* before pronouns of the first and second persons in WS, less regularly in Angl, see §6.7. As mentioned in §6.12, heavy stems ending in a post-consonantal sonorant usually lack orthographic syncope, e.g. *bȳcneſt* ‘betoken’, *timbreð* ‘constructs’, see further §6.96.¹ Also as with the strong verbs, see §6.12, syncope is regular in the pres.ind.2&3sg. in LWS after heavy stems, irregular after light stems, hence *fremest*, *fremeð* alongside *fremst*, *fremð*, see further §6.82, except that syncope fails regularly after light stems ending in /r/. Weak present and past participles are declined the same way as the corresponding strong participles, see §§4.28–9.

¹ In LWS there occur occasional forms like *nemst*, *nemð* beside usual *nemnest*, *nemneð*, to *nemnan* ‘name’ only.

6.82 As with the strong verbs, see §6.4, already in PGmc the original inflexions were in the process of becoming fused with stem formatives. The forms tabulated in §6.80 may be derived from early PGmc paradigms of the following type, with the exceptions noted below in §6.84:

		Present Indicative	
Sg. 1	*framjō	*nazjō	*fōrijō
2	*framjis	*nazjis	*fōrijis
3	*framjiþ	*nazjiþ	*fōrijþ
Pl. 3	*framjanþ	*nazjanþ	*fōrijanþ
		Present Subjunctive	
Sg. 3	*framjai(þ)	*nazjai(þ)	*fōrijai(þ)
Pl. 3	*framjain	*nazjain	*fōrijain
		Imperative	
Sg. 2	*frami	*nazi	*fōrī
Pl. 3	*framjanþ	*nazjanþ	*fōrijanþ
		Preterite Indicative	
Sg. 1	*framidōn	*naziðōn	*fōriðōn
2	*framidǣs	*naziðǣs	*fōriðǣs
3	*framidǣ(þ)	*naziðǣ(þ)	*fōriðǣ(þ)
Pl. 3	*framidǣðun	*naziðǣðun	*fōriðǣðun
		Preterite Subjunctive	
Sg. 3	*framidǣðī(þ)	*naziðǣðī(þ)	*fōriðǣðī(þ)
Pl. 3	*framidǣðīn	*naziðǣðīn	*fōriðǣðīn
Infinitive	*framjanan	*nazjanan	*fōrijanan
Infl.inf.	*tō framjanjai	*tō nazjanjai	*tō fōrijanjai
Pres.part.	*framjanðijaz	*nazjanðijaz	*fōrjanðijaz
Pa.part.	*framidaz	*naziðaz	*fōriðaz

Note that in the paradigm of the etymon of *fēran*, Gmc */j/ after a heavy syllable is realized as *[ij] under Sievers's Law, see Hogg (1992b: §4.6). In the preterite, where it appears between the root-final consonant and */ð/ of the suffix, it is realized as [i], which is the vowel found in some early texts, e.g. CædN 5 *astelidæ* 'established', BDSN 5 *dōēmid* 'judged', though later it is lowered and spelt <e>, see *ibid.*: §6.50. Alongside *astelidæ*, other early spellings with <æ> in the pret.sg. include RuneRuthwellA 1 *ġeredæ* 'prepared', RuneAuzon 3 *afæddæ* 'fed'. In verbs with original light stems (*fremman*, *nerian*: see §6.80) there is no syncope of this [i] in the preterite or in inflected forms of the pa.part., whilst after original heavy stems (*fēran*) WGmc *i is syncopated throughout the preterite and in the pa.part. when it bears an inflexion beginning with a vowel, in accordance with the prescriptions of *ibid.*: §§6.18–19. That is, pa.parts. have syncope in the same forms as disyllabic adjectives, see §§4.44ff. Thus, for example, the pa.part. of *fremman* is *fremed* nom.sg., *fremedum* dat.pl., whilst that of *forðfēran* 'die' is *-fēred* nom.sg., *-fēredne* acc.sg.masc., *-fērdum* dat.pl. The distinction, however, is often disrupted by analogy.¹ In those forms in which */j/ appeared before */i/ in WGmc, it was lost, see *ibid.*: §4.7, hence pres. ind.2sg. **framjis*, **nazjis*, **fōrijis* > WGmc **framis*, *nazis*, *fōriis*; 3sg. **framjīþ*, **nazjīþ*, **fōrijīþ* > WGmc **framīþ*, **nazīþ*, **fōriūþ*. In the imper.sg., PIE *-e was early lost in finality, leading to vocalization of /j/, hence **framje*, **nazje*, **fōrije* > WGmc **framī*, **nazī*, **fōrī*. In all other forms of the present, in all moods, Gmc */j/ remained, and in light syllables in WGmc it caused gemination of a stem-final consonant other than /r/ (from both PGmc */r/ and */z/, the latter by rhotacism, see *ibid.*: §§4.15–16) and was subsequently lost after the heavy syllable thus created, see *ibid.*: §§4.11–14. Since it did not cause gemination of /r/ under the same circumstances and thus did not follow a heavy syllable, it was not lost in most pres. forms of *nerian* but is preserved as <i>.

¹ In WS and most Angl dialects there are frequent analogical forms in which syncope has been reversed, e.g., in Ælfric, *ġehýrede* 'heard', *ġedrefede* 'disturbed'. Conversely, syncope is less frequently found after light stems, e.g. *cnyste* 'struck', *ġetrymde* 'strengthened', PPs 108.25 *weġdan* 'agitated'; see also §§6.85, 6.96–7. In LWS there may even be syncope in uninflected participles with stems ending in <p> or <nc>, e.g. ÆLS (Agnes) 45 *beclypt* 'embraced', ÆCHom I, 18 221.135 *geswenct* 'oppressed'. (On WS syncope in stems ending in /t/ or /d/, see §6.93.) PsGl(A), however, is particularly conservative in retaining the original distribution of syncopated forms.

6.83 The OE pret. suffix *-d-* was devoiced to [t] when it came into contact with a root-final voiceless consonant, for example *wyrpte* 'recovered', *pyfte* 'puffed', *mētte* 'met', *cyste* 'kissed', *līxte* 'illuminated', *wýscte* 'wished', *þrycte* 'crushed'. Other verbs of this sort include *clyppan* 'embrace', *acwenc(e)an* 'quench', LWS *cýpan* 'buy, sell', *cyspan* 'fetter', *drenc(e)an* 'ply

with drink', *drȳpan* 'moisten', *adwǣsc(e)an* 'extinguish', *bedyppan* 'immerse', LWS *hȳpan* 'amass', *hyspan* 'revile', *rempan* 'hasten', LWS *berȳpan* 'rob', *scēnc(e)an* 'pour', LWS *scīrpan* 'sharpen, equip',¹ *scērenc(e)an* 'ensnare', *senč(e)an* 'sink', *tostenč(e)an* 'scatter', LWS *astȳpan* 'deprive', *swenč(e)an* 'vex', *ofpȳsc(e)an* 'repress', *wlenč(e)an* 'make proud', LWS *wyrpan* 'recover from an illness', LWS *ȳč(e)an* 'increase', and others, including the verbs with stems in /t/ listed in §6.93. However, spellings with <d> after a voiceless consonant do occur occasionally, especially in Nbr, e.g. *wǣpde* 'wept', *gēnēolēcde* 'approached'. The devoicing rule does not apply to /d/ after fricatives except geminates, and geminates are found in the preterite only when the doubling stems from PGmc rather than from WGmc gemination, see §6.92. Non-geminate fricatives in the preterite were voiced before the time of syncope, see Hogg (1992b: §7.58), so that they caused no devoicing of /d/ once syncope brought the two consonants into contact: cf. *rǣsde* 'rushed' < **raisidǣ*, *fȳsde* 'impelled', etc. On the reverse effect of /d/ on stem-final consonants, see §6.95.

¹ The two senses are etymologically distinct, but there is no difference in inflexion.

6.84 The forms in §6.80 directly reflect those in §6.82, with the same exceptions as are noted for strong verbs in §6.9. The development of pres.ind.2sg. *-is to OE -(e)st is paralleled by the development of pret.ind.2sg. *-ð-ǣs to OE -d-est, cf. §6.14. The termination *-ðǣðum in the pret.ind.3pl., reflected in Got -dēdun, probably would not develop under normal conditions to NWGmc *-ðun, but the repetition of consonants most likely prompted refashioning under the influence of the strong preterite: see §6.93n3. The same change is to be assumed for the preterite subjunctive.

6.85 The dialect distribution of syncopated forms of the pres.ind.2&3sg., and the variant inflexions encountered, are like those for strong verbs, see §§6.12, 6.15–19. Thus, generally, there is regular syncope after heavy stems in Ælfrician WS and lKt, usual non-syncope in Angl, and a mixture of forms in EWS and in anonymous LWS texts. In weak verbs, syncope after light stems ending in sonorants is exceptionally infrequent, e.g. *gēfremð* 'performs', *getrymð* 'strengthens'; cf. §6.12. On syncope after dental stems, see §§6.93–5. In syncopated forms, the same consonant assimilations and dissimilations are encountered as in strong verbs, e.g. **kūþ-is(t)* > *cȳst* 'make known', **sand-iþ* > *sent* 'sends', see §6.13. The Nbr mixture of endings -es, -eð, -as, etc., in strong verbs, see §§6.19–20, is general in weak verbs of class I, as well.

6.86 The inflexion -e of the imper.sg. of originally light stems is not infrequently extended to heavy stems in LWS, Ru1 and Nbr, e.g. Gen 42.31

þençe, Ru1 *cēge*, *fylge*, Li *sende*, *gehēre* alongside *send*, *gehēr*. Conversely, *-e* may be lost from originally light stems, e.g. ByrM 3.1.183 *tel(l)*, Ru1, Nbr *sel*; or, if *-e* is retained, the geminate may be levelled into the imper.sg., e.g. Ru1 *selle*.

6.87 In Nbr, less frequently in Ru2 than in Li and DurRitGl, the past participle may take the strong suffix *-en*, usually in inflected forms, e.g. Li *ymbgyrdeno* ‘girded’, *gesendeno*, *geseteno*, *gewælteno* ‘bended’, alongside uninflected *ymbgyrded*, *gesended*, *geset(t)ed*.

6.88 In WS, verbs with gemination tend to acquire the stem and inflexions of weak verbs of class II. Thus, already in EWS, to the verbs **lemman* ‘disable’, *getrymman* ‘strengthen’, *aðennan* ‘stretch out’ there occur CP *lemiað*, *getrymian*, Or *aðenian*. The process is accelerated in LWS, where preterites of the class II type also appear, e.g. ÆCHom *fremode*, ÆLS *getrymode*, *gewenode* ‘accustomed’. However, the seeming chronology of these developments, with change appearing in the present stem before the preterite, may be deceptive.¹ As the examples illustrate, these WS changes are for the most part restricted to stems in final sonorant, for reasons that are not plain.² In Ru1 and in Nbr there is also a strong tendency for verbs of class I, with stems either heavy or light, to acquire preterite inflexions belonging to class II, e.g. Li *getrymade*, Ru2 *æftergiwendad* ‘turned back’, DurRitGl *underlihtad* ‘alleviated’. On similar preterites to verbs like *nerian* with original */j/*, see §6.80.

¹ We might assume that already in EWS the distinction between *-ode* and *-ede* was a matter of orthographic conservatism rather than phonetic contrast, so that in speech a form like *trymede* was indistinguishable from *trymode*. It is otherwise difficult to explain why the change of verb class should have been expressed first in the present stem, though it was in the preterite that the two types were least distinct. See Kastovsky (1998: 142–3).

² It might at first be supposed that the change was predicated on the form taken by the preterite, those verbs with the endings *-ede*, *-edon* in the pret. then forming a new present of the class II type. Verbs with a geminate dental stop, e.g. *settan*, *breddan*, thus would not have qualified, cf. prets. *sette*, *bredde*, and verbs with geminate velar consonant were mostly like *reccan*, *byccgan*, prets. *reahste*, *bohste*, see §6.100, and so they would have been unaffected. But this leaves a number of verbs unaccounted for, such as *aswebban*, *beswebban*, *cnyssan*, *wecgan*, *þicgan*. The arguments of Stark (1982: ch. 4) shed little light on this problem.

(b) Stems

6.89 As will be apparent from the paradigms in §6.80, the stem used for the preterite of weak verbs of class I (as well as of classes II, III, it should be added) is identical in the sg. and pl. Thus, in presenting the principal parts of weak verbs it is necessary to cite just three forms: (i) infinitive,

containing the stem on which is based the present of all moods and all non-finite forms but the pa.part.; (ii) preterite 3 singular, containing the stem used for all preterite forms; (iii) past participle.

6.90 As pointed out in §6.82, the suffix **-j-* caused gemination of consonants other than /r/ after a light syllable wherever it was not lost in WGmc, followed by umlaut. Voiced fricatives become stops in gemination, e.g. in *swebban* ‘put to sleep’ < Gmc **swabjan* and *weċgan* ‘agitate’ < **wazjan*, see Hogg (1992b: §4.13). Cf. the corresponding fricatives in pa.parts. *swefed*, *weġed* < **swabiðaz*, **waziðaz*. Except in PsGl(A) and Kt, geminates are sometimes levelled into forms in which non-geminates are to be expected, e.g. GD *ġecnyssed* ‘struck’, ÆCHom *ġefremmed*, Ru1 *selleþ* ‘gives’, Li *ġetrymmede*. Levelling in the opposite direction is rare, but cf. Nbr *selo*, *silo* ‘I give’. The synchronic status of the verb stem is of some interest.¹ When the abstract noun-forming suffix *-nes(s)* (see §2.47) is added to the stem, in PsGl(A) and Mercian-influenced WS texts it is usually the stem of principal part (iii) that is used, which is disyllabic in originally light stems, e.g. *trymenis* ‘strengthening’, *ġesetenisse* ‘construction’, cf. pa.parts. *trymed*, *seted*; also *herenis* ‘praise’, the usual form in all dialects. Other dialects employ a monosyllabic form of the stem, e.g. *trymnis*, *ġesetnis*. The treatment of verbs with stem-final velar consonant, however, may be different: see §6.100.

¹ For discussion, see Suzuki (1990).

6.91 The addition of the pres. inflexions *-st*, *-þ* and the pret. suffix *-d-* sometimes produced consonant clusters that could be reduced by phonological loss. Examples are *nemst*, *nemð*, frequent *nemde*, all forms of *nemnan* ‘name’, see §6.81n1, *cemde* to *cemban* ‘comb’, CP 36.249.23 *awierdena* gen.pl. ‘accursed’ < *awiergdena*, Beo 1401 *gende* ‘went’ < *gengde*. See Hogg (1992b: §§7.84, 86). LWS *wīste* ‘wished’ for *wīsc̥te* is not cluster reduction but assimilation to place of articulation; similar is PsGl(A) *ġehnistun* ‘softened’, to *ġehnisċan*. Geminate consonants in clusters are regularly simplified, e.g. *ċyrde* ‘turned’ < **cyrr-de* and *sende* ‘sent’ < *send-de*, though analogical spellings are sometimes found, e.g. *ġefyllde* ‘filled’, LS 1.1 269 *sendde*. Some more regular alternations in the stems of weak verbs of class I may be categorized as in the following sections.

(i) Stems with original geminate

6.92 The geminates in some weak stems are due not to WGmc gemination but to early Gmc consonant assimilation, e.g. PIE **p_hH-n-y-* > PGmc **fullij-*, see Hirt (1931: §75). In such instances the stem was already heavy before WGmc consonant gemination, and as a consequence the stem is inflected like *fēran* rather than *fremman*, e.g. inf. *fyllan* ‘fill’, pres.ind.1sg.

fylle, 3sg. *fyl(l)ð*, pret. *fyl(l)de* (not ***fylede*), pa.part. *fylled* (not ***fyled*). Like *fyllan* are *cennan* ‘produce’, LWS *cyrran* ‘turn’, *cyssan* ‘kiss’, LWS *fyllan* ‘fell’, LWS *afyrran* ‘remove’, LWS *myrran* ‘mar’, *pyffan* ‘puff’, *spillan* ‘destroy’, *stillan* ‘appease’, *þryccan* ‘crush’, *wemman* ‘besmirch’, *yppan* ‘reveal’, and Nbr *cnylla* ‘toll’, *forestemma* ‘prevent’ and their derivatives.

(ii) Stems in dental consonant

6.93 Syncope exceeds the normal limits on its domain of application in certain stems ending in dental consonants. In Angl, past participles whose stem ends in /t/ or /d/ show the expected alternations, e.g. nom.sg. *geseted* ‘set’, *gesended* ‘sent’, and with syncope before vocalic inflexions, pl. *gesette*, *gesende*. Such forms are also common in non-Ælfrician LWS, and occasionally in EWS,¹ perhaps under Merc influence, see Hogg (1992b: §1.10). But otherwise in Early and Ælfrician WS, and to an extent in lKt,² syncope applies even to uninflected forms, with both light and heavy stems, thus nom.sg. *geset(t)*, *gesend*. It is also found in closed medial syllables, e.g. *gesendne* acc.sg.masc. ‘sent’, cf. GD 2 (C) 31.164.25 *gelædedne* ‘led’. Moreover, in all dialects syncope applies in the preterite of stems ending in /t/ or /d/ even when the stem is light, e.g. *sette* ‘set’ (not ***setede*), EpGl 611 *treddun* ‘trampled’.³ Other verbs affected this way include *bædan* ‘compel’, *bætan* ‘hunt’, *bendan* ‘bend’, *bētan* ‘atone’, *blendan* ‘blind’, *brædan* ‘extend; roast’,⁴ *onbryrdan* ‘incite’, *byldan* ‘build’, LWS *byldan* ‘embolden’, *ċīdan* ‘quarrel’, *cnyttan* ‘bind’, *acræftan* ‘devise’, *gedæftan* ‘arrange’, LWS *dýdan* ‘kill’, *ċaðmēdan* ‘humble’, *efstan* ‘hasten’, *ēhtan* ‘pursue’, *geendebyrdan* ‘arrange’, *fæstan* ‘fasten, fast’,⁵ *fætan* ‘decorate’, *fēdan* ‘feed’, *gefrefdan* ‘feel’, *fylstan* ‘aid’, *afyrhtan* ‘frighten’, *grētan* ‘greet’, *gyldan* ‘gild’, *agyltan* ‘offend’, *gyrdan* ‘gird’, *hæftan* ‘capture’, *hætan* ‘heat’, *hlæstan* ‘lade’, *hlýdan* ‘make a clamour’, *hlystan* ‘listen’, *hreddan* ‘rescue’, *hwettan* ‘incite’, *hwītan* ‘whiten’, *hýdan* ‘hide’, *hyhtan* ‘hope’, LWS *onhyldan* ‘bend’, *behyldan* ‘flay’, LWS *hyrdan* ‘harden’, *hyrstan* ‘equip’, LWS *hyrstan* ‘fry’, LWS *hyrtan* ‘hearten’, *læstan* ‘fulfil’, *lendan* ‘arrive’, *lettan* ‘prevent’, LWS *lihtan* ‘illuminate’, *lystan* ‘desire’, *mæstan* ‘fatten’, *mētan* ‘meet’, *myntan* ‘think’, *nætan* ‘annoy’, *nīstan* ‘nest’, LWS *nýdan* ‘compel’, *pyndan* ‘impound’, *rædan* ‘advise, read’,⁶ *restan* ‘rest’, *rētan* ‘delight’, *rihtan* ‘correct’, *scēndan* ‘confound’, LWS *scýldan* ‘shield’, *scýndan* ‘hasten’, *scýrtan* ‘shorten’, *spætan* ‘spit’, *spildan* ‘ruin’, *sprædan* ‘spread’, *spryttan* ‘sprout’, *swætan* ‘sweat’, LWS *syltan* ‘salt’, *ontendan* ‘kindle’, *treddan* ‘investigate’, *tyhtan* ‘incite’, WS *geþēodan*, *geþýdan* ‘join’, *forþræstan* ‘crush’, *þyrstan* ‘thirst’, *wædan* ‘clothe’, *wætan* ‘moisten’, *wēdan* ‘rage’, *wendan* ‘turn’, *awēstan* ‘lay waste’, LWS *wyldan* ‘control’, LWS *wyltan* ‘roll’, LWS *awyrđan* ‘injure’, LWS *yldan* ‘delay’, and verbs in *-ettan*, e.g. *bliccettan* ‘glitter’, *liccettan* ‘pretend’, *roccettan* ‘eructate’, *sārettan* ‘grieve’, *sporettan* ‘kick’ and (with different origin, from compounds) *andettan*

‘confess’, *ōnettan* ‘hasten’, *ōrettan* ‘fight’, see *ibid.*: §7.79n1. It is also notable that, in WS, whilst syncope is infrequent in the present tense after a light syllable ending in a sonorant, see §6.85, syncope is the rule in WS for dental stems, e.g. 3sg. *set(t)* ‘sets’, *ahret* ‘rescues’. In Nbr there is frequent degemination of /dd/, /tt/, even after short vowels, e.g. Li *set(t)on*, *gefōēdon* ‘fed’ pret.pl., as well as extension of geminates to positions in which they did not originally appear, e.g. *setteð* pres.3sg., see *ibid.*: §2.78n1.

¹ E.g. CP *gelæded*, *onsended*.

² Cf. also Ru1 *befest* ‘espoused’, *gesett*, beside usual Engl unsynocopated forms.

³ The motivation for this development, which is fundamentally dissimilatory in nature, most likely is avoidance of identical sounds in adjacent syllables; cf., e.g., the development of PGmc **-ðæðun* in the preterite of this class, §6.84; the change of an unstressed back vowel to *e* when a back vowel follows in the next syllable, see Hogg (1992b: §6.64); and the tendency of *-od-* to be replaced by *-ad-* in the pret. and pa.part. of verbs of the second weak class with /o(:)/ in the root, see §6.113. Phonological strategies for the avoidance of like sounds in successive syllables are common throughout the Gmc languages; cf., e.g., the change of [ʏ] to [ɔ] in Modern Icelandic dat.pl. in *-unum* [ɔ-nʏ·m], e.g. *bönnunum* ‘bananas’.

⁴ The two verbs are etymologically discrete, but they are inflected identically.

⁵ Perhaps originally to class III, see §6.130.

⁶ Usually weak in WS, due to coalescence with the Gmc weak verb reflected as Got *ráidjan* ‘determine’. Cf. §6.76.

6.94 A peculiarity of *settan* ‘set’ is that /i/ in the preterite was lost in WGmc, before the application of umlaut, as evidenced by OSax pret. *satta* alongside *setta*. For the most part, in OE the umlauted vowel of the present has been levelled into the pret. *sette* and pa.part. *sett*. The stem *gesætt-*, however, is to be found in ÆLS (4×), ChronE, and some other LWS texts, as well as in Ru1 and Li (1× each), and cf. Li *gesattedo* pa.part. *Settan* is thus like *lecgan* in this respect, see §6.101.

6.95 When the dental consonant that ends the stem is /ð/, syncope applies within its normal limits in all dialects. But /ð/ may be assimilated to the following /d/ in all dialects, thus WS *cýdde* beside *cýðde*, Li *cýdde* beside *gécýðde*, Ru1 *cýddun* beside *cýðdon*. Other stems in /ð/ include *clæðan* ‘clothe’, *cwīðan* ‘lament’, *ahýðan* ‘plunder’, *læðan* ‘abuse, hate’, *nēðan* ‘venture’, *sēðan* ‘affirm’, *oferswīðan* ‘overcome’,¹ *wræðan* ‘anger’, and others.

¹ Also with a strong pret., see §6.43.

(iii) Stems in original final sonorant

6.96 The weight of the stem preceding the sonorant plays a decisive role in the development of stems ending in a postconsonantal sonorant /r, l, m, n/. (a) When a stem-final, postconsonantal sonorant follows an otherwise light syllable, syncope for the most part operates normally in the preterite,

e.g. *efnde* ‘performed’, *seglde* ‘sailed’. Occasionally there appear exceptional forms in which orthographically there is no syncope, e.g. CP, ChronA *bytledon* ‘built’ (inf. *bytlan*),¹ ChronA 877.1 *sigelede*, ÆCHom *gecwylmede* ‘killed’ (inf. *cwylman*), Li *geefnade*, *genægledede* ‘nailed’.² In such forms the unusual vowel before /d/ perhaps does not indicate lack of syncope but syllabification (or retention of syllabicity) of the preceding sonorant between consonants, comparable to the syllabification described in Hogg (1992b: §§6.34–40). This is what is suggested by metathetic parallel spellings of heavy-stemmed verbs in Nbr, e.g. *timberde* ‘built’ for WS *timbrede*. (b) As in the pres.ind.2&3sg., see §6.81, when a stem-final postconsonantal sonorant follows an otherwise heavy syllable, there is always syllabification of the sonorant before the preterite suffix /d/, e.g. *bȳcnedon* ‘signified’, *frēfrede* ‘consoled’, *hyngrede* ‘hungered’, *timbrede* ‘built’, inf. *bȳcnan*, *frēfran*, *hyngran*, *timbran*.³ There is a strong tendency for such verbs to be transferred to weak class II in all dialects, hence inf. *frēfrian*, *hyngrian*, *timbrian*. The motivation for this transferral is probably the consideration that, with the exclusion of prefixes, the pret. stem of other heavy-stemmed weak verbs of class I is usually monosyllabic. With the reduction of unstressed medial vowels to /ə/ and the dissimilation of unstressed back vowels, see *ibid.*: §6.64, for example with the development of a weak II pret. like *gēpolodon* to *gēpoledon* ‘endured’, a form already to be found in EWS, preterites like *timbrede* became formally indistinguishable from preterites of the second weak class. In PsGl(A) such preterites in fact are given spellings distinctly characteristic of verbs of class II, e.g. *timbrade*, though past participles are spelt in the WS manner, e.g. *timbred*. Ru1 is like PsGl(A) except that *-ed-* appears beside *-ad-* in the pret., e.g. *hyngrade*, *hyngrede*. Nbr has *-ad-* and *-ed-* in both preterites and past participles, in addition to forms like *timberde* mentioned above.

¹ Perhaps significantly, there is no evidence of a verb *bytlian* (class II weak) in EWS. See below.

² Some other relevant verbs are *eġlan* ‘afflict’, *ræfnan* ‘perform’, *þrysmān* ‘stifle’. Certainly not to be included here is chiefly poetic pret. *mādelode* ‘made a speech’, which must have been formed not from *mæðlan* of class I but from the noun *mæþ(e)l* ‘assembly’. It and the pret. *mæðde* (from **mæðlde*) are confused orthographically in verse, where the metre often shows which form was intended. Given that anaptyxis is infrequent in verbs like *seglde* even in late prose, metrically trisyllabic *mādelode* (with late orthographic *mādel-* for the poet’s **māðl-*, see Fulk 1992: §249) must be due to a different cause. On this question, see Ringe (2004).

³ Other verbs of this type include WS *dȳġlan* ‘conceal’, (*for*)*glendran* ‘swallow’, Angl *lēðran* ‘anoint’, *ofersyl(e)fran* ‘silverplate’, *symblan* ‘banquet’, *wrixlan* ‘exchange’, *wyrmsan*, *wyrsmān* ‘fester’.

6.97 Verbs with stems ending in approximants are subject to loss of the approximant in WGmc under some circumstances before */i/, see

Hogg (1992b: §§4.7–8). Thus, stems with final /w/ should lose it before pres.ind.2&3sg. *-is, *-iþ, imper.sg. *-i and the pret. and pa.part. stem formative *-id-. That is, a verb like LWS *gyrwan* ‘prepare’ should lose /w/ everywhere a verb like *fremman* has a non-geminate. However, /w/ is almost always restored in stems in which it followed a vowel, e.g. LWS *hlȳwan*, *ġehlw̄wð*, *ġehlw̄we* ‘warm’, beside *hlēowan*.¹ The relevant verbs with /w/ after a consonant are LWS *frætwan* ‘adorn’, **agæhlwan* ‘terrify’ (only pa.part. Or 4 10.103.17, Bo 34.86.10 *agæhlwed(e)*), *gyrwan* ‘prepare’, *hyrwan* ‘condemn’, *nyrwan* ‘confine’, *ræswan* ‘consider’, *smirwan* ‘anoint’, *syrwan* ‘plot’, **wylwan* ‘roll’ (e.g. pa.part. GD (H) 2.101.13, PsCaE 3(2).3 -*wylwed*). With /w/ after a long vowel² or diphthong are the verbs *bȳwan* ‘rub’, *hlȳwan* ‘warm’,³ *lēwan* ‘betray’, **siowan* ‘sew’,⁴ *forslēwan* ‘delay’, **spiowan* ‘spit’,⁵ LWS *ġetrȳwan* ‘trust’, LWS *ȳwan* ‘show’.⁶ The original forms from which /w/ has been deleted are in fact quite common in WS and Angl verbs in which /w/ followed a consonant, e.g. LWS *gyreð*, *gyrede*. But analogy often intervenes even in verbs in which /w/ follows a consonant, leading to restoration of /w/, e.g. *gyrweð*, *gyrwe*. As a consequence, the incidence of loss varies from verb to verb: e.g., *frætwan* never lacks <w>, but the postconsonantal approximant is usually missing from **wylwan*. Since loss of /w/ in such forms occurred in WGmc, forms in which */w/ was lost after /r/ or /l/ should not undergo breaking, and it is true, breaking is missing from EWS forms of *smirwan* and, in part, *sierwan*, e.g. CP *smirede*, *ġesirede*, though these might be explained according to *ibid.*: §5.165; but analogy intervenes to produce CP, Or *sierede*, etc. Restoration of /w/ must have been early, since it is found already in the early glossaries, e.g. EpGl *ġigeruuid*, CorpGl *ġeġeruuid*, *ġesmirwid* pa.parts. Moreover, the increased syllable weight provided by the insertion of /w/ is metrically required in the conservative language of some poetry, e.g. Rid 20.2, 9, though more often are found forms without /w/ that would not scan if /w/ were inserted, e.g. Beo 994, 1472. Of course, *gyrweð* and *gyrwe* do not resemble normal heavy stems of class I, since such ought to have syncope, and indeed, some verbs of this type do show syncope frequently, e.g. LWS *ġenyrrwð*, *ġenyrrwe*. But instead of analogical restoration of /w/, there may be the opposite analogical development, with loss of /w/ from all forms. As a result, such verbs may be conjugated like *nerian*, e.g. inf. *wylan* ‘roll’ for **wylwan*, CP *ymbseriesað*. Naturally, then, they may develop preterites to class II in LWS, thus ÆCHom II, 11 93.51 *wylode*, LibSc 28.30 *bewylewud*, ÆCHom I, 5 *syrwodon*. Practice varies from verb to verb, however, so that, for example, *gyrwan* rarely shows forms to class II,⁷ whilst *nyrwan* inflects according to class II about half the time.⁸ Verbs are treated differently according to dialect, as well: e.g., forms of *smirwan* are etymologically correct in PsGl(A), but there is loss of *w* in almost all forms of this verb in Nbr.

¹ Exceptional is CP *ætēde* ‘showed’ (2×). Cf. also prets. Ru2 *bilēde*, Li *beleede*, to Nbr **belēwan*. Often cited in this connexion is *gehlyde* pret.3sg., but we cannot at present authenticate the form. It appears in the 1698 edition of ÆCHom II, 35 by Thwaites (p. 165, l. 2), which was edited not from any of the four extant medieval manuscripts but from a transcript by William L’Isle, now Oxford, Bodleian Library, Laud E. 381: see Cook (1898: lxxiii).

² On /w/ before /j/ after a short vowel, see §6.98.

³ Etymologically, *hlȳwan* < WGmc **hliuwan* is like *strēgan* < WGmc **strauwan* (§6.98); the different results are due to the different treatment of /wj/ after /iu/ and /au/, such that **hliuwan* loses /j/, whilst **strauwan* loses /w/, see Hogg (1992b: §3.18), but cf. §6.98n1 regarding a problem with this explanation. Like *hlȳwan* in this respect is *getrȳwan*. Note that *hlȳwan* continues EWS **hliēwan*, whilst *hlēowan* shows the expected Angl development. Az 85 *hlēoð* pres.ind.pl. is analogical to Angl pret. **hlēode*.

⁴ Only CorpGl 2 17.51 *siouu* pres.ind.1sg. and forms of the pa.part., e.g. *gesiouuid*, *seowed*, all with uncertain vowel quantities. Possibly the verb belonged originally to class III: cf. OHG *siuwēn*.

⁵ Only poetic prets. *spēowdon*, *spīowdon*, *spiowedon*. The quantity of the diphthong could be standardized as short if the verb were assumed to have originated in class III, though the cognates offer no support for that hypothesis. Alternatively, there may have been analogical influence from the strong verb *spūwan*.

⁶ *ȳwan* is an exception to the pattern revealed in *hlȳwan*, *trȳwan*, see n3, as it derives from **auwan*. There also occurs an unumlauted form *ēawan* native to EWS and Angl, see §6.130. The preterite in class I should have been Pre-OE **eid-* from **ewid-* before loss of hiatus, but no reflex of this is found. Instead, the stem **ewid-* was transferred to class II and thus re-formed as **ewōd-/ewūd-*, producing WS *eowod-*, whence inf. *eowian* was formed. The stem *eow-* does not occur in Angl, and Beo 1738 *eoweð* spoils the metre, which instead requires a form with a heavy initial syllable. Like *ȳwan* in this respect is *bȳwan* ‘rub’, with pa.part. *a-*, *ge-beowed* alongside *abȳwed*.

⁷ In the unprefixed verb, only ProgGl 1.207 *gerwiġan*, Solil 1 8.16 *gyruwast*.

⁸ The verb *rāswan* is particularly rich in analogical variants, with restoration of /w/ in *rāswedð*, *rāswedest*, as well as transferral to class II both with and without /w/, e.g. *rāswian*, *rāswodan* alongside *rāsian*, all once each.

6.98 When **w/* before **j/* followed a short vowel, it formed a diphthong with that vowel in PGmc. However, **w/* was preserved in PGmc if **j/* was lost early, as it was in the pres.ind.2&3sg.¹ Thus, in these forms as well as in the imper.sg. and all preterite forms, and the pa.part., **w/* should have stood before **i/* and thus should have been lost in WGmc. The result should have been a paradigm in which a diphthong before **j/* alternated with a short vowel before **i/*, e.g. non-WS inf. *strēgan* ‘strew’ < **straujan* (< WGmc **strauwan* (?),² see §6.97n3), alongside pa.part. *strēd* < **stræid* < **strawidaz*.³ The relevant verbs are LWS *cīġan* ‘call’, non-WS *strēgan*.⁴ The expected forms do occur in some Angl texts, e.g. PsGl(A) *cēð* ‘calls’, pa.part. *gecēd*, but regularly in WS, and often in Angl, <g> is extended from other forms, e.g. LWS *cīġþ*, Nbr inf. *toġecēiġa*. There is no trace of **w/* in *hnāġan* ‘abase’ (cf. Got *hnāiwan*), and /j/ is usually restored to all forms, e.g. *ġehnāġde*, but cf. LS 1.1 (AndrewBright) 187 *ġehnāde*. To *hnāġan* cf. Angl **dīon* ‘suck’, with loss of /j/ throughout.⁵

¹ The early rise of this alternation offers an alternative explanation for a form like *hl̥ywan* < **hliuwjan*, since the infinitive should have been **hliujan* in PGmc, and thus there would have been no /w/ to be geminated in WGmc. There may instead have been analogical extension of /w/ to this form from, e.g., pres.2sg. **hliwiþ*, with a result much like that seen in OE *cnēo(w)* ‘knee’ due to processes that occurred at a much later date, see §2.32. Accordingly, it may be that *strēgan* never developed an analogical /w/ but directly reflects Gmc **straujan*, contrary to Hogg (1992b: §3.18).

² But the verb possibly originates in class III, see §6.130.

³ Beo 2436 *strēd* must be scanned as two syllables, of which the first may be light.

⁴ *Hēgan* ‘exalt’ does not belong here, since it develops from **haubijan*, see §6.99.

⁵ From **dijan*, with loss of /j/ extended analogically throughout the paradigm. The attested forms are PsGl(A) *milcdēondra*, Nbr *dīendra* gen.pl. ‘sucklings’, Li *gedūides* pret.2sg. (corrupted to *dedēdes* in Ru2). Cf. Old Swedish *dīa*, and compare, with full grade, OHG *tāen* ‘suckle’ < **dējan*.

(iv) Contracted verbs with loss of [h]

6.99 Loss of intervocalic [h] and of hiatus in the stems of weak verbs are not as consequential as in strong verbs, see §§6.38–9, but they do produce some irregularities. Loss of stem-final [h] should have occurred wherever the /j/ suffix was vocalic, i.e. in the same forms as those in which *fremman* has a non-geminate: pres.ind.2&3sg., imper.sg., preterite and past participle. Because the root vowel was always fronted by umlaut, it contracted with following /i/ to a monophthong. Hence we find, e.g., *þyð* ‘presses’ < **þūhiþ*, pret. *þyde*. In forms in which /j/ remained (and was subject to Sievers’s Law after a heavy syllable), we might expect a development such as inf. **þūhijan* > **þy-ijan* > Rid 86.9 *þyġan*,¹ and this may be the best explanation for forms like Bede 33.382.26 †*þyġde* pret.sg.,² PsGl(I) *ðurhðyġdon*, *ūtaðyġdest*, formed by analogy to principal part (i).³ But instead the inf. is usually *þywan* (whence pret. *þywde*, etc., by the same analogy), beside Lch II *þyn* (2×), probably by analogy to *þyð*, etc. We may perhaps imagine *þywan* to reflect **þūwijan*, in which /w/ developed in the hiatus left by the loss of [h]: cf. the insertion of /w/ into hiatus in strong verbs like *blāwan*, *sāwan*, etc., §6.70n4.⁴ Like *þyn* are *tyn* ‘instruct’, *ryn* ‘roar’, **scyn* ‘urge’. It is doubtful whether infs. *þeon* ‘press’, *tēon* ‘instruct’ are to verbs of this type.⁵ No inf. is attested to Li *gedr̥yde* ‘pressed’, HomU 7 (ScraggVerc 22) 40 *gedr̥yd* pa.part. or to Nic(A) 1.1.8 *gewēð* ‘twists’, AldV 14.128 *gewēde* pa.part. A development similar to that in *þyġan* is seen in *hēgan* ‘exalt’ (cf. Got *háuhjan*), which has *ġ* extended analogically in HlGl (Oliphant) E41 *geh̥ġde*, LWS *geh̥yd* (3×, from **geh̥yġd*, see Hogg 1992b: §7.71); PsGl(A) *upah̥est*, *geh̥ēð*, poetic pret. *geh̥ēde*, -on show the expected development with loss of **/j/* before **/i/*.⁶ Some relevant forms of contracted verbs are attested in the early glossaries, some without contraction, e.g. EpGl 649 *fāehit* ‘paints’, 661 *fāedun* pret pl., 515 *sc̥yhend* ‘pursuer’, CorpGl 2 5.400 *ap̥ryid* ‘plundered’. On LWS *þwyrian*, see §6.103n4. On contracted weak verbs, see further Fulk (2010b).

¹ Whether *þýgan* is a form of this verb, however, is uncertain, as the text is fragmentary.

² Only in Cambridge University Library MS. Kk. 3, 18. The forms in the other mss lack <g>.

³ Campbell (1977: §753(8)) and Brunner (1965: §408A17) instead explain *g* in such forms as modelled on verbs like *čýgan*. Their assumption must be that **-ij-* would have been lost after the heavy syllable before the loss of [h], but that assumption would be difficult to prove. It may be that the vocalic alternant spawned by Sievers's Law allowed /j/ to remain relatively late. Given the variety of analogical proportions required to explain the attested forms of these verbs, the early glossary forms cited below cannot be considered decisive counterevidence.

⁴ The unattractive alternative is to reconstruct PGmc **þūwijan* beside **þūxijan*, see Campbell (1977: §753.8n3), yielding forms like those cited in §6.97.

⁵ These are probably best analysed as strong infs. The sole evidence for *þēon* is Rid 40.91 *gēþēon* and *ÆHomM* 15.340 *þēowde*, the former of which may be strong, the latter a result of scribal confusion with common *þēowde* 'served'. Dream 54 *forþēode* is more likely *forþ ēode*, as in Pope (2001: 11).

⁶ Forms like inf. *hēan*, pa.part. *gēhēad* belong to weak class II, despite Brunner (1965: §408A17). See also §6.116 on whether the stem *hēg-* might be to the second rather than the first class.

(v) Stems in final velar consonant

6.100 A number of verbs had no vowel **/i/* before the dental preterite suffix in PGmc, with the consequence that they lack umlaut in the OE preterite and past participle. Their stems all ended in either /l/ or a velar consonant. Presumably /l/, too, was velar in such stems in PGmc, as it is in comparable contexts in PDE (though not in most modern Gmc languages), and absence of connecting **/i/* may thus be explained as due to the articulatory mismatch between palatal **/i/* and the preceding velar consonant.¹ WS stems ending in /l/ without umlaut in the preterite have principal parts like those of *tellan* 'tell':

(a) tellan tealde teald

Like *tellan* are *cwellan* 'kill', *dwellan* 'mislead', *stellan* 'position', *syllan* 'give' (EWS *sellan*, see Hogg 1992b: §5.171n2). There is breaking of PGmc **a* in the preterite and past participle in WS and Kt, but not in the Angl dialects: see Hogg (1992b: §5.15). The infinitives of verbs of this sort are unusual because they show no breaking prior to the umlaut of Pre-OE **æ* to *e*. The usual explanation is that /l/ was palatalized by the following /j/ in Gmc **teljan* and thus did not have the requisite velarity to cause breaking after WGmc gemination.² In addition, there are occasional preterites and past participles to these verbs formed like normal verbs with umlaut, particularly in Nbr, e.g. *CædN* 4 *astelidæ*, Li *acuoel(e)don*, *acwelled*, *gēteled*, Ru2 *acweledun*, but also Or *onsteled*, *gēteled* (the latter normal in poetry); and LWS *dwelian*, *dwelede*, *dwelode* (to *dwellan* 'deceive'), to be explained according to §6.88, to the extent that these are not simply confused with

forms of class II *dwelian* ‘err’. Verbs of this sort with stem-final consonants other than /l/ all have /x/ in the preterite, so that the dental suffix takes the form /t/.³ The vocalism of verbs of this type is widely subject to analogical replacement. Several different subtypes may be categorized. The largest group is like *reċċ(e)an* ‘recount’:

(b) reċċan reahte, rehte reaht, reht

Like *reċċan* are *cweċċ(e)an* ‘vibrate’, *dreċċ(e)an* ‘afflict’, *leċċ(e)an* ‘moisten’, *streċċ(e)an* ‘stretch’, *þeċċ(e)an* ‘cover’, *w(r)eċċ(e)an* ‘rouse’.⁴ Possibly also to be categorized here is *wleċċan* ‘make tepid’.⁵ Spellings with <ea> in principal parts (ii–iii) are absent from Ælfric,⁶ and those with <e> extended from the present are to be found already in the early glossaries (e.g. EpGl *arectae*), in EWS and in PsGl(A), in the last beside smoothed <æ>. Similar to *reċċan* but with /y/ in the root is **clyċċ(e)an* ‘clutch, clench’.⁷ To be distinguished from *reċċan* ‘recount’ (a) is *reċċ(e)an* ‘care’ (c):

(c) reċċan rōhte rōht

The earlier form of the inf. was **rēċan* < **rōkjan* (cf. OSax *rōkian*), but there is no firm evidence for a long vowel in the present in any dialect of OE;⁸ cf. already in CorpGl 2 14.631 *reċċileas* ‘heedless’. The shortened vowel can be explained as the result of the geminate consonant, but the cause of the gemination is not plain.⁹ Like *reċċ(e)an* but retaining the original long vowel is *sēċ(e)an* ‘seek’:

(d) sēċan sōhte sōht

Shortening like that in *reċċ(e)an* (b) is probably to be assumed in *læċċ(e)an* ‘seize’:

(e) læċċan lāhte, lǣhte lāht, lǣht

Mostly Nbr spellings of this verb with <a> in the pret., coupled with the absence of spellings with <ea>,¹⁰ render it fairly certain that the vowel in the pret. is long. The etymon thus should be reconstructed with PGmc **/ai/* in the root.¹¹ Like *læċċan* but retaining the long vowel derived from PGmc **/ai/* is *tǣċ(e)an* ‘teach’:

(f) tǣċan tāhte, tǣhte tāht, tǣht

Like *tǣċan* is *rǣċ(e)an* ‘reach’, possibly also **ofhǣċan* ‘hack off’.^{12,13} Angl forms retain <a> in principal parts (ii–iii), whilst <æ> in principal parts

(ii–iii), borrowed from the present, appears already in EWS, beside <a>, and in some late texts, including ChronE, BenRGl and some charters. One verb with unumlauted preterite has PGmc */r/ before stem-final */k/, *wyrċ(e)an* ‘work’:

(g)	wyrċan	worhte	worht
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The root contains PGmc *ur < PIE *r̥, with *u retained before umlauting *j in the present but lowered to o elsewhere.¹⁴ Not infrequent metathesized preterites like *wrohte* are LWS (once in Ru2), as are pret. *forwyrhte*, pa.part. *forwyrht* to the derivative *forwyrċan* ‘sin’. Consistent PsGl(A) *wirċ-* in the present is from the full grade, PIE *werǵ-y-, as in OSax *wirkian*; otherwise, sporadic WS *wirċan* (also in Li, Ru2) is due to unrounding, cf. Got *waurkjan*, and see Hogg (1992b: §5.31). Angl pret. forms like *warhte* are found in CorpGl 2, LS 3 (Chad), Or, PsCaE, RuneMortain 1, see *ibid.*: §5.34.¹⁵ Similar to *wyrċan* is *byċġ(e)an* ‘buy’, with a present like that of *fremman* (§6.80):

(h)	byċġan	bohte	boht
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The pres.ind.3sg. is WS *byġeþ*, see §6.85. Finally, three verbs have /n/ in the present that is missing from the preterite, *brenġ(e)an* ‘bring’, *þenc(e)an* ‘think’, *þync(e)an* ‘seem’:

(i)	brenġan ¹⁶	brōhte	brōht
	þencan	þōhte	þōht
	þyncan	þūhte	þūht

In the preterite these show the effect of the loss of a nasal consonant before */x/ in PGmc, with compensatory lengthening, e.g. *þranxtā > *brōhte*, see *ibid.*: §3.13. It is noteworthy that when nouns with the suffix *-nes(s)* are formed to verbs without umlaut in the preterite, an unumlauted present stem is used, hence *wyrċnis* ‘operation’, *gereċenis* ‘direction’, although other weak verbs employ the preterite stem, see §6.90.

¹ See Hogg (1971). For a more elaborate explanation, involving absorption of */i/ and re-velarization of /l/, see Prokosch (1939: §67(c)).

² By contrast, there is breaking in GD 1 (H) 5.44.11 *griellan* ‘provoke’, LWS *awyllan* ‘boil’ (EWS *awiellan), the latter, at least, with a PGmc geminate, cf. ON *vella*, whilst the etymology of the former is uncertain. It thus may be that palatalization of /l/ depended upon a following consonantal /j/, so that after heavy syllables the alternant *-ij- under Sievers’s Law did not block the operation of breaking: see Barrack (1998: 153–5).

³ The preterites of some of these archaic verbs thus cannot be reconstructed as originating in periphrases with the etymon of PDE *do*, as then it would be difficult

to explain why there is devoicing in *bohte* ‘bought’ and similar forms, see §6.79&cn7. Rather, the preterite of such forms must be reconstructed with PIE **t/l*, PGmc **t/θ*, which would devoice the preceding /y/ in PGmc **buʒ-b-* and then lose frication by dissimilation from the preceding fricative. See §§6.79, 6.108. The **t/θ* in the prets. *tealde*, etc. is then to be explained by the process described in Hogg (1992b: §4.18).

⁴ The usual form is *weċc(e)an*; *wreċc(e)an* is LWS, but cf. also CP 28.193.20 *wreċcan*. In Li, *weċca(n)* is confused with *waċc(e)a(n)* ‘keep vigil’, hence pres.ind.3sg. *awæċcēð*, subj. *awæċce*, etc., beside forms with <e>. Similar confusion reigns in regard to PDE *wake*, *awake*, *waken*, *awaken*.

⁵ There occurs a stem *gewleht-* (3×) in Lch I and PrudGl 1, beside *gewleht-* (3×) in Lch I, II, the former perhaps smoothed from *gewleabt-*. The stem is etymologically light, PGmc **wlakjan*, cf. *wlæc*, *wlacu* ‘tepid’. Unsyncopated *gewleced-* (5×) in Lch II seems an analogical re-formation.

⁶ Only ÆHomM 2 (Irv 3) 353 *astreahtum*, in a late ms.

⁷ On the basis of Notes 2 (Kluge) 18.116 *clyce* imper.sg. and LibSc 25.9 *gēclibt* pa.part., Brunner (1965: §407A12) posits a similar verb **sċyċc(e)an* ‘seduce’ by comparison to *sċucca* ‘succubus’, given the preterites *sċyhte*, *asċihtest* in poetry and Psalter glosses. But the verb is more usually identified as **sċyhtan* by comparison to **sċyn* or **sċyġan* (see §6.99) ‘urge’ < **skūhijan*.

⁸ The possibilities are examined by Brunner (1965: §407A3).

⁹ In regard to the vowel shortening, Hogg (1992b: §5.199) offers no solution, but see Fulk (1998).

¹⁰ Only ÆLS (Eugenia) 383 *geleabt*.

¹¹ An appealing possibility is the oft-cited proposal that the word is cognate with Grk *λάζουαι* ‘I seize’ < PIE **lagʷ-γ-*, giving Gmc **lakw-*, see Orel (2003: 234), with references. But aside from the problem of the preterite spellings, there is the difficulty that the umlaut of Gmc **a* before an OE geminate is OE *e*, not *æ*, see Hogg (1992b: §5.80).

¹² Only ÆLet 2 (Wulfstan 1) 190 †*ofhæhte* pret.3sg. in the edition of Fehr (1914: 136), from Cambridge, Corpus Christi College 201.

¹³ The form *bedæhte* cited by Brunner (1965: §407A12) from AldV 1.1499 is a ghost; the more recent edition by Goossens (1974) used by the *DOEC* has instead *betæhte*. See Bammesberger (1976b).

¹⁴ The situation is partly explained in Hogg (1992b: §3.10), cf. Brunner (1965: §45.5), with some details. After the development of PIE **o* to **a* in Gmc, there was no **o*, and *o* in the Gmc languages is thus usually to be ascribed to the lowering of **u*. The chief exception in OE is the development of Gmc **a* before nasal consonants, see *ibid.*: §5.3, though this <o> remains distinct from **o* derived by the lowering of **u*.

¹⁵ In ME, *wa-* for OE *wo-* is restricted chiefly to the North and to the North-East Midlands in *wald-* and *world*, dot maps 168, 291 in McIntosh, Samuels and Benskin (1986: I); also East Anglia for the latter.

¹⁶ More commonly the strong stem *bring-* is used. Weak *brenġ-* is especially common in EWS, Kt and Nbr; *bring-* is the exclusive stem in PsGl(A), and it is nearly so in LWS. See §6.57(e).

6.101 A special case is *leġgan* ‘lay’, which, like *settan* (§6.94), did not originally belong to the category of weak preterites without umlaut, but from which /i/ in the preterite was lost in WGmc, as evidenced by OSax pret. *lagda* alongside *legda*. For the most part, in OE the umlauted vowel of the present has been levelled into the pret. *leġde*. In WS, the pret. stem

lægd- appears chiefly in late manuscripts (e.g. *ÆHomM* 2, 7; *ChronD*, E s.a. 1064ff.), but cf. *Ru1 lægdun*, *alægde*, *Mart* 5 (Kotzor) *onlægde*. *WS* has also forms like *lēde*, *gēlēd*, with compensatory lengthening, see Hogg (1992b: §§5.128, 7.71).

6.102 Not all stems in final velar consonants lack umlaut in the preterite. The reason is that those showing no umlaut belong to an ancient category of so-called primary verbs, that is, with non-derived stems, see Bammesberger (1986b: 69). Later accretions to the class of weak verbs, being secondary, form the preterite in the normal manner, e.g. *fylg(e)an* ‘follow’, *LWS awyrġ(e)an* ‘curse, strangle’, *LWS ȳc(e)an* ‘increase’, *ġewæc(e)an* ‘weaken’:

(a)	<i>fylġan</i>	<i>fylġde</i>	<i>ġefylġed</i>
	<i>awyrġan</i>	<i>awyrġde</i>	<i>awyrġed</i>
(b)	<i>ȳcān</i>	<i>ȳcte</i>	<i>ȳced</i>
	<i>ġewæcān</i>	<i>ġewæcte</i>	<i>ġewæced</i>

Others like *fylġan* include *LWS biġan* ‘turn aside’, *æbylġ(e)an* ‘offend’, *LWS byrġ(e)an* ‘bury; taste’,¹ *dryġ(e)an* ‘dry’, *fēġan* ‘unite’, *LWS aflȳġ(e)an* ‘put to flight’, *swēġ(e)an* ‘make a sound’, *wrēġan* ‘stir up’. In such verbs *ġ* after a consonant may become syllabic, e.g. *fylīn*, *fylīġð*, *fylīġde*, see Hogg (1992b: §§6.36, 43–4). Other verbs like *ȳcān* include *cnycc(e)an* ‘tie’, *dēc(e)an* ‘smear’, *nēalāc(e)an* ‘approach’, *ōlēcc(e)an* ‘soothe’, *bepāc(e)an* ‘betray’, *sȳc(e)an* ‘give suck’, *þrycc(e)an* ‘press’, *wlēcc(e)an* ‘make tepid’,² and compounds in *-lāc(e)an* besides *nēalācān*, i.e. *ġedyrst-*, *ġeefen-*, *ġeriht-lāc(e)an*, etc.³ Because the cluster *-ct-* arose in the preterite and inflected past participle of such verbs only after syncope, we do not see the regular development to *-ht-* that occurs in verbs without umlaut in the preterite, §6.100. However, probably by analogy to them, *-ct-* is very often replaced by *-ht-* in these verbs, with considerable regularity in *LWS*, e.g. *ȳhte*, *nēalāhte*, *bepāhte*, *ġewāhte*. That this change is largely analogical is suggested by the observation that much less frequent is the change of /k, g, ȳ/ to /x/ before the pres.ind.2&3sg. inflexions *-st*, *-ð* in verbs with and without umlaut in the preterite, e.g. *tāhst* ‘teach’, *ġenēalāhð* ‘approaches’, *bepāhð* ‘betrays’, see §6.13. In *Ælfric* there occur uninflected participles like *ġeefenlāht* ‘emulated’, *ġenēalāht* ‘approached’ beside expected forms like *ġerihtlācēd* ‘rectified’, *ġedēced* ‘smear’d’.

¹ The two verbs are etymologically discrete, though they have identical forms.

² On unusual forms of *wlēcān*, see §6.100n5.

³ Eichner (1992) lists 37 OE verbs bearing the suffix *-lācān* and demonstrates the chiefly late, artificial morphological relation they bear to adjectives in *-lic*.

6.103 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, weak verbs of class I include *sendan* ‘send’, *sellan* ‘give’, *settan* ‘set’, *hýran* ‘hear, obey’, *fēran* ‘go’, *cennan* ‘produce’, *wyrčan* ‘create’, *lečgan* ‘lay’, *andwyrđan* ‘answer’, *lāeran* ‘teach’, *lāedan* ‘lead’, *wendan* ‘turn’, *sēčan* ‘seek’, *dēman* ‘judge’, *mētan* ‘meet’, *lýsan* ‘redeem’, *andettan* ‘confess’, *bringan* ‘bring’,¹ *herian* ‘praise’, *drēfan* ‘oppress’, *cýđan* ‘expose’, *bētan* ‘atone for’, *fyllan* ‘fill’, *hāelan* ‘heal, redeem’, *lyfan* ‘believe; allow’,² *nemnan* ‘name’, *þyncan* ‘seem’, *rāeran* ‘raise’, *cyrran* ‘turn’, *restan* ‘rest’, *ýwan* ‘show’, *tāčan* ‘instruct’, *byrđan* ‘bury; taste’² and their derivatives. Weak verbs of class I are very numerous. Some verbs inflected like *nerian* are the following: *berian* ‘clear’, *byrian* ‘befit’, *derian* ‘injure’, *erian* ‘till’, *ferian* ‘go’, *herian* ‘praise’, *onhyrian* ‘emulate’, *amerian* ‘test’, WS *scirian* ‘ordain’,³ WS *bescirian* ‘deprive of’,³ *snyrian* ‘hasten’, *spyrian* ‘ask’, *styrian* ‘stir’, *þwyrrian* ‘oppose’,⁴ *werian* ‘defend; wear’,² *đerewerian* ‘clothe’. Some verbs like *fremman* (and not like *fyllan*, see §6.92) are the following:⁵ *clymnan* ‘ring’, *cnyssan* ‘dash’, *dynnan* ‘resound’, *gremman* ‘provoke’, **hečgan* ‘fence in’, **hellan* ‘hide’, *hlymnan* ‘make a noise’, *hriřsan* ‘shake’, *řceþþan* ‘damage’,⁶ WS *ascillan* ‘divide’,³ *aswebban* ‘put to sleep’, **beswebþan* ‘wrap’, **syllan* ‘sully’, *temman* ‘tame’, *trymman* ‘strengthen’, *þennan* ‘stretch out’, *þicđan* ‘accept’,⁷ *wečđ(e)an* ‘agitate’, *wennan* ‘accustom’, *wreþþan* ‘support’. In addition to the verbs listed above as amongst the commonest in the MCOE, as well as verbs with original geminates, see §6.92, a few amongst the very many verbs inflected like *fēran* are the following: *āelan* ‘kindle’, *āernan* ‘cause to run’, *cēlan* ‘cool’, LWS *čigān* ‘call’, *bečlyřsan* ‘confine’, *tocwýřsan* ‘crush’, *drāefan* ‘drive out’, *drēfan* ‘disturb’, LWS *flyman* ‘put to flight’, *fýřsan* ‘hasten’, *foręāđđ(e)an* ‘transgress’, *glengđ(e)an* ‘trim’, *glēřsan* ‘gloss’, LWS *gyman* ‘heed’, LWS *gyřman* ‘desire’, *hāeman* ‘copulate’, *bringđ(e)an* ‘ring’, LWS *hwyrřfan* ‘turn’, LWS *hýnan* ‘abase’, *lāefan* ‘leave’, *lāenan* ‘lend’, *lengđ(e)an* ‘lengthen’, *māenan* ‘mention’, *mengđ(e)an* ‘mingle’, *benāeman* ‘deprive’,⁸ *rāesan* ‘rush’, *rýman* ‘make room’, *řprengđ(e)an* ‘scatter’, LWS *řtrynan* ‘engender, amass’, WS *řtēoran*, *řtýřan* ‘steer’,⁹ *tāelan* ‘censure’, *tāesan* ‘pull’, *tengđ(e)an* ‘press towards’, *oftyrřfan* ‘stone’, LWS *wyrřnan* ‘withhold’. For a list of verbs inflected like *fēran* with stems ending in /t/ or /d/, see §6.93; in PGmc */k/ or */ř/, §6.102.

¹ Strong present: see §§6.57(e), 6.100n16.

² The two senses are etymologically discrete, but the relevant forms are indistinguishable.

³ With palatal diphthongization, Hogg (1992b: §5.53).

⁴ From **þwiorþijan*, giving EWS **þwierian*, without compensatory lengthening, see Hogg (1992b: §5.124). Forms like *ęepweorod* pa.part. (transferred to weak class II) have /eol/ by analogy to *þweorþ* ‘contrary’.

⁵ Many of these are attested only without geminates, with inf. in *-ian*, see §6.88.

⁶ Also strong, see §§6.65, 6.67.

⁷ Also strong, see §§6.53, 6.63&cn2; the stem *þicđ-* is etymologically strong.

⁸ On the difficult vocalism of the root, see Bammesberger (1979).

⁹ On the vocalism, see Hogg (1992b: §5.84).

2 Weak class II

6.104 The second class of weak verbs is the only one to which new verbs were regularly added during the historical OE period. Gmc weak verbs of class II are comparable to Latin verbs of the first conjugation, e.g. *amāre* ‘to love’, since they are both formed with the PIE suffix **-eH-* > **-ā-*, which in PGmc develops to **-ō-*. In origin this PIE **-ā-* is the stem formative of feminine nouns like Lat *libra* ‘pair of scales’ (cf. verb *librāre* ‘balance’), Grk *τιμή* ‘honour’ (fem. noun; cf. *τιμάω* ‘I honour’), OE *lufu* ‘love’ < PGmc **luþō* (noun; cf. *lufi(ġ)an* ‘to love’ class II), since, originally, verbs of this class were derived from feminine nouns, see §6.79n3. But the class was highly productive, so that new verbs were formed from many different sources, not all of them nominal. That is, the PIE suffix **-ā-* came to be added to noun stems that had never borne the suffix, e.g. Lat *dōnāre* ‘give’ (verb; cf. neut. *dōnum* ‘gift’), OE *lofian* ‘honour’ (verb; cf. neut. *lof* ‘honour’), and to stems other than noun stems, e.g. OE *hālgian* ‘hallow’ (cf. *hālig* ‘holy’), *clifian* ‘adhere’¹ (cf. strong *clifan* ‘adhere’), *ūtian* ‘expel’ (cf. adv. *ūt* ‘out’).

¹ In origin a verb of class III, see §6.130.

6.105 Like weak verbs of class I, those of class II derive from a PIE formation in which **-y-* was added to the present stem, as with Sanskrit *ṛṭtanāyāti* ‘fights’ < **ṛṭtenā-y-e-ti* (cf. fem. noun *ṛṭtanā* ‘fight’). Thus, in PGmc the present stem of weak verbs of class II was formed by the addition of **-ō-* + **-j-* + inflexion after the theme vowel following **-j-* was absorbed into the original inflexion, just as in other verbs, see §§6.4, 6.82. Unlike in weak class I, however, but as in PIE, the suffix **-j-* was added only to the present stem. In the preterite and past participle, in PGmc the same dental suffix as in class I was added directly to the stem formative **-ō-*, hence inf. *lufi(ġ)an* ‘love’ < **luþ-ō-j-anan*, but pret.3sg. *lufode* < **luþ-ō-ðā*. What we see in *lufiġan* is umlaut of **ō* to **ē* by the following **j*, followed by shortening of **ē* to **e* under low stress, and then raising to /i/ before /j/, much as in adjectives in *-iġ* < **-æġ*, see Hogg (1992b: §§6.51–2). As in such adjectives, the raising of **e/* to /i/ occurred too late for the latter to cause umlaut of the root vowel. When umlaut is encountered in the root, this is usually a sign of a verb transferred from weak class III, see §6.129.

(a) Inflexions

6.106 In EWS the inflexions of weak verbs of class II are, with the exceptions discussed below, the same for all stems, regardless of weight. They may be exemplified by the paradigm of *lofi(ġ)an* ‘praise’:

Present	Indicative	Subjunctive	Imperative
Sg. 1	lofiġe	lofiġe	
2	lofast	lofiġe	lofa
3	lofað	lofiġe	
Pl.	lofiað	lofiġen	lofiað
Preterite			
Sg. 1	lofode	lofode	
2	lofodest	lofode	
3	lofode	lofode	
Pl.	lofodon	lofoden	
Infinitive	lofian		
Infl.inf.	to lofianne		
Pres.part.	lofiende		
Pa.part.	lofod		

It will be seen that verbs of this class have *-i(ġ)-* wherever verbs like *fremman*, §6.80, have a geminate. On the co-occurrence of *-i-* and *-iġ-*, see Hogg (1992b: §7.76). In WS, *-iġ-* is normal before the ending *-e(n)*, but *-i-* and *-iġ-* vary freely before *e* in the inflected infinitive and pres.part., whilst *-iġ-* or *-iġe-* before *a* is exceedingly infrequent in Ælfric, though it is not uncommon elsewhere.¹ In LWS, *-ion* occurs frequently in the pres.subj.pl., with the same distribution as *-on* in strong verbs, see §6.23. Unlike in verbs such as *nerian* of class I, *-i-* in verbs of class II is syllabic.² As regards the co-occurrence of <e> and <a> in the inflected infinitive that is seen also in other classes, see §§6.6n1, 6.80n1, *-i(ġ)anne* is the usual form in EWS, and it is used almost exclusively in Angl; note that PsCaA 2 19.27 to *ārwyrbienne* is in the LWS portion of the gloss. Ælfric, however, has *-ianne* only very rarely (and never *-iganne*). In the pret. and pa.part., *-od-* is the usual form of the dental suffix in LWS, but *-ad-* and *-ud-* also occur, for reasons explained in §6.113; and *-ed-* is quite common in WS, both Early and Late, especially before *-on*, by dissimilation, see *ibid.*: §6.64.

¹ To supplement what is said in Hogg (1992b: §7.76), it should be remarked that *-iġa-* is not infrequent in EWS, though *-ia-* plainly predominates. Note also the spelling CP, Mart 4 *plegean* for *plegian*, where <ge> may be simply /j/ (see §6.130), as is certainly the case in Or *berġean* ‘harry’, cf. pret. *berġeade*.

² See §6.80. As further evidence, Brunner (1965: §412A1) points out that syllabicity is probably indicated by acutes written on *i* in verbs of this class in CP (H), e.g. *cliepiáð*, *forbradién*. Exceptions to the rule of syllabic *-i-* are chiefly examples of inflected infinitives and present participles, see §6.112; spellings with simple <g> in other forms are exceedingly rare, e.g. BenRW *scēawġe*.

6.107 As with the strong verbs, plural verb endings are generally reduced, though in this class to *-i(ġ)e* rather than *-e*, before pronouns of the first

and second persons in WS, less regularly in Angl, see §6.7. Present and past participles are declined the same way as the corresponding participles of weak class I, see Hogg (1992b: §§4.28–9).

6.108 The suffix **-āy-e- ~ *-āy-o-* that marked verbs of this type in PIE should be expected to have developed in PGmc to **-ōj-i- ~ *-ōj-a-*. According to the older view, this PGmc stem formative is directly reflected in forms like OE *lofian* < **luþōjan*. However, in Got, ON and OHG there is no trace of **/j/* in verbs of this type, rather the reflexes of stems in **-ō-* to which inflexions were added directly, without any intervening **/j/*. Accordingly, it now appears much more likely that **/j/* after an unstressed vowel other than **/i/* was lost in PGmc,¹ with subsequent loss of hiatus, and **-ōj-i-* and **-ōj-a-* thus developed to **-ō-*. The **/j/* reflected in forms of these verbs in OE, OFris and (in part) OSax is thus a NSGmc innovation, whereby the terminations of heavy-stemmed verbs of weak class I were added to Gmc stems in **-ō-*. Thus, for example, pres.ind.pl. **luþō-þ* was re-formed to **luþō-jap* by analogy to heavy-stemmed forms of class I like **fōri-jap*, whilst pres.ind.3sg. **luþō-þ* remained unchanged, given the analogy to **fōri-þ*.² The forms tabulated in §6.106 may thus be derived from an analogously constructed NSGmc paradigm of the following type, with the exceptions noted below in §6.109:

Present	Indicative	Subjunctive	Imperative
Sg. 1	*luþōjō	*luþōjai	
2	*luþōs	*luþōjais	*luþō
3	*luþōþ	*luþōjai	
Pl.	*luþōjāþ	*luþōjain	*luþōjāþ
Preterite			
Sg. 1	*luþōðǣ	*luþōðī	
2	*luþōðǣs		
3	*luþōðǣ	*luþōðī	
Pl.	*luþūðun	*luþōðīn	
Infinitive	*luþōjanā		
Infl.inf.	*tō luþōjannjai		
Pres.part.	*luþōjandī		
Pa.part.	*luþōðaz		

The typical paradigm of a verb of weak class II was thus formed from a stem in **-ō-* to which two kinds of inflexions were added, those with initial **-j-* and those without it. In the pret.ind.pl., **ō > *ū* under the influence of *u* in the following syllable, see Hogg (1992b: §3.34), and see further §6.113 on the consequences of this.

¹ The objections of Birkhan (1974: 4–7) are unconvincing.

² This is the persuasive argument of Cowgill (1959). Neutralization of the sg. and pl. in the forms cited provides a partial motive for the analogical change, but the structure of the preterite was no doubt also a contributing factor, since, e.g., **luþō-ðǣ* parallels **fōri-ðǣ*, inviting analogous correspondences in the present stem. The rationale for positing PIE **-ā-y-e/o* rather than simply **-ā-* as the stem formative lies with non-Gmc comparative evidence.

6.109 The forms in §6.106 directly reflect those in §6.108, with the same exceptions as are noted for strong verbs in §6.9. The development of pres.ind.2sg. **-ōs* to OE *-ast* is paralleled by the development of pret.ind.2sg. **-ð-ǣs* to OE *-d-est*, cf. §6.84. On the development of the termination **-ðǣðun* in the pret.ind.pl. (with similar development in the pret.subj.), what is said in §6.84 applies here, as well.

6.110 As regards the distribution of *-(ġ)e-* and *-(ġ)a-* outside of WS, in Ikt the situation resembles that in EWS, see §6.106, except that *-ġa-* never occurs. In Merc, PsGl(A) has almost consistently *-ie-* and *-ia-*,¹ whilst, conversely, Ru1 has mostly *-iġe-*, *-iġa-*, *-iġæ-*.² In Nbr, *-iġe-* and *-iġo* are the rule, whilst *-ia-*, rare beside *-iġa-* in Ru2, is commoner in Li and DurRitGl.

¹ The exceptions are *gearwiġu*, *ġenyhtsumġende*, *ondettiġen*, *ondettiġað*; but *ġedeafmeað* looks like orthographic metathesis of **ġedeafeniað*.

² Brown (1891–2: II, §50) reports *-iġ-* 63×, *-i-* 15×, *-ġ-* 1×, Ø 56×. In addition, *-i-* may be extended from the pres.ind.pl. to the 3sg. Conversely, *-i-* may be missing from the ind. and imper. plural, e.g. *ġesomnaþ*, *forhtaþ*.

6.111 There is great variability in the inflexions to this class found in Ru1 and in Nbr, with many innovations and analogical forms. Thus, for example, Kolbe (1912: §199.3) lists the following endings for the pres.ind.3sg. in Li: *-að*, *-iað*, *-aðe* (prob. for pret. *-ade*), *-as*, *-ias*, *-eð*, *-es*, *-ies*, *-æð*, *-æs*, *-et*, *-aġið*, *-aið*, *-iaġað*, *-aġeð*, *-aġes*.¹ By contrast, inflexion is rather regular in PsGl(A), where the only notable variants are rare forms in *-iġ-* or *-eġ-* instead of *-i-*, occasional inflected infinitives and pres.parts. without *-i-* (see §6.112), and occasional *-ud-*, more frequent *-ed-*, for usual *-ad-* in the pret. and pa.part., see Zeuner (1881: §53).

¹ Brunner (1965: §412A3–10) offers an accounting of such dialect forms.

6.112 Medial vowels, even those originally long, are often syncopated when followed by a heavy syllable bearing tertiary stress, cf. Hogg (1992b: §6.31). Such a situation presented itself in the inflected infinitive and the pres.part. of weak verbs of class II, where **ō* should have developed to **a*, which would then be syncopated before the following heavy syllable, thus producing **luþjændi*, **luþjænni*. This development was too late to

produce gemination before /j/, and probably too late for /j/ to cause umlaut of the root vowel; but after a heavy stem the /j/ would be lost, e.g. **fund-jændi* > **fundændi*. The distinction in the development of light and heavy stems in this respect is observable in the early Merc glossaries, where we find, e.g., EpGl light-stemmed *uudirhliniendae* ‘reclining under’, *tilgendum* ‘endeavouring’ alongside heavy-stemmed *gānaende* ‘gaping’, *hlēodendri* ‘resounding’ (for *hlēodrendi*), *torctendi* ‘showing’, etc.; but already there is levelling in light-stemmed *dobendi* ‘doting’ (cf. CorpGl *dobgendi*). The difference is also observable in poetry, where there occur spellings like GuthA,B *gnornende* ‘lamenting’ (3×), El, Phoen *drūsende* ‘failing’, and where such words even when spelt with *-i-* must usually be scanned without it, e.g. Ex 453 *flugon forhtigende*, see Sievers (1885: 482). In the major Angl texts the original distinction has been much disrupted by analogy, but forms of the inflected infinitive and pres.part. without *-i-* are quite common in both light and heavy stems.¹ In WS and Kt, however, the forms with *-i-* have almost consistently been generalized, although simple *-g-* occasionally appears, especially in the infl.inf. and pres.part., e.g. ChrodR 1 to *mōdgenne* ‘to be overbearing’, BenRGl to *mōtgenne*, though these forms are surely not archaisms.

¹ The Angl texts and forms are surveyed by Brunner (1965: §412A10).

6.113 Whilst the usual form of the dental suffix in the pret. and pa.part. is *-od-* in WS, in Kt and Angl it is *-ad-*. The latter represents a generalization of the reflex of the shortening of **-ōd-* found in most forms of the pret. and pa.part., whereas the former represents the analogical extension of the reflex of the shortening of **-ūd-* found in the pret.ind.pl. and in some cases of the pa.part., e.g. dat.pl. **lubūdum*, cf. e.g. §2.84. In the latter form of the suffix, with **-ū-*, the vowel after shortening should have been syncopated after a heavy syllable, but apparently it was preserved or restored by analogy to the form of the suffix found after light syllables.¹ The analogical extension of *-ad-* and *-ud-/od-* is far advanced already in the earliest glossaries, e.g. ErfGl *suarnadun* ‘coagulated’, *meldadum* ‘informed’, EpGl *aslacudae* ‘slackened’, *geregnodae* ‘rained’ beside etymological *suornodum*, *lithircadae* ‘flattered’, *gesuidradrae* ‘diminished’, etc. The form of the suffix *-ad-* is unusual in LWS, but it is not infrequent in Ælfric when the root of the verb contains /o(:)/ or /u/, e.g. *bodade* ‘announced’, *geopenade* ‘opened’, *ðrōwade* ‘suffered’, *wunade* ‘remained’, *geedcucade* ‘revived’, *suwade* ‘was silent’, *lufade* ‘loved’. In keeping with the tendency for unstressed vowels to lose their distinctiveness, see Hogg (1992b: §6.62), especially in IOE, in all dialects the dental suffix may appear as *-ed-*, even when a back vowel does not follow, e.g. (-)*wunede* in Ælfric, PsGl(A), Ru1, Li; cf. also EWS CP *ofermōdgede*, Kt OccGl *gēðafede* ‘allowed’, etc.

Occasionally there are to be found preterites with simple *-d-*, unaccompanied by any reflex of **ō*, on the basis of analogy to verbs of class III that have been transferred to class II, see §6.130, e.g. Li *ym(b)scēawde*.²

¹ Cf. Hogg (1992b: §6.32n1). This analysis is at variance with that of Campbell (1977: 351), who follows Luick in supposing that shortening of high vowels took place after high vowel syncope. The reasons for such an assumption are countered in Fulk (1992: §§187–93). Rather, WS forms like *gyldenum* < **gulðinum* that appear to be unsyncopeated are better explained as showing the same analogical restoration of the syncopated syllable that is seen in forms like *hālīge*, see §4.47. It seems impossible to prove that *a* as the reflex of **ō* would not also have been syncopated, but if it had been, there would have been syncope in the preterite of all heavy-stemmed verbs of weak class II, and it would then be surprising that, with rare hypothetical exceptions like Li *ym(b)scēawde*, not a single such syncopated form survived as a relic. See Fulk (1992: §228).

² See further Ross (1937: 151–2).

(b) *Stems*

6.114 Stems with */i/* (or */e/* in *seofian* ‘lament’, the umlaut of **/a/*) in a light root syllable were subject to back umlaut in the preterite and past participle, as well as in present forms bearing inflexions that did not begin with **/j/* (see §6.108), under the usual limiting conditions in each dialect, e.g. EWS *cliopode*, *cleopode*, Merc *cleopade*, Nbr *cliopade* ‘called’. In all dialects, the diphthong that thus resulted could be levelled into forms with inflexions in **/j/*, thus EWS *cleopian*, etc., beside WS *clipian*, Ru1 *clipigende*. In WS there is a strong tendency for back umlaut to be levelled out of all forms, so that, in texts other than those showing Angl influence, rarely is back umlaut found in verbs other than *clipian* and *tilian*, e.g. PPs (prose) 21.11 *geonað*, ÆHom 21.100 *cleofode*, and */i/* is very often restored even in the preterite of *clipian* and *tilian*. But *seofian* always has back mutation. The relevant verbs, in addition to *clipian*, are *bifian* ‘tremble’,¹ *clifian* ‘adhere’,¹ *ginian* ‘yawn’,¹ *hlinian* ‘lean’,¹ *hnipian* ‘droop’, *seofian* ‘lament’, *tilian* ‘cultivate’.¹ In addition, *stician* ‘stab’ might show back umlaut in Kt only, see Hogg (1992b: §5.103), hence CollGl 12.23 *stiocode* alongside OccGl 49 22.23 *ofsticoð*. WS *geswugian* beside *geswigian* ‘be silent’ shows combinative back umlaut, see *ibid.*: §5.109(1), with */u/* extended analogically from the pret.pl. and some inflected forms of the pa.part., in which PGmc **ō* developed to OE *u*, see §6.108.²

¹ Perhaps in origin a verb of class III, see §6.130.

² *Sweogian* shows normal back umlaut, probably as a non-WS variant, see Hogg (1992b: §5.109). On *sugian*, see Campbell (1977: §470); on *suwian*, see Brunner (1965: §214.8). The Angl verb has */i:/*, as confirmed by poetic metre, e.g. Beo 2897 *Ljȳt swīgode*; cf. OHG *swīgēn*. Why the WS vowel is short is unknown, see Flasdieck (1935: 49–50). The verb in origin belonged to class III, see §6.130.

6.115 A number of verbs of weak class II are formed with stem-final /ɣ/, especially verbs derived from adjectives in *-ig*. The final consonant of the stem is velar rather than palatal in all forms, even before *-i-*, since /o:/ originally followed in all forms, e.g. **hailazōjan* > *hālgian*. Some of the relevant verbs are *dys(e)gian* ‘act foolishly’, *hālgian* ‘hallow’, *hef(e)gian* ‘oppress’, *her(e)gian* ‘harry’,¹ *hīgian* ‘hasten’, *met(e)gian* ‘moderate’, *gemyndgian* ‘remember’, *sārgian* ‘pain’, *scyldgian* ‘render liable to punishment’, *sorgian* ‘lament’,² *syngian* ‘sin’, *wel(e)gian* ‘enrich’, *wērgian* ‘weary’, *wītgian* ‘prophecy’. Naturally, /k/ also remains velar, e.g. in *þancian* ‘thank’.

¹ On the difficult derivation of *bergian* from Gmc **xarjōjan*, see §6.118n2; and for forms with /j/ rather than /ɣ/, see §§6.106n1, 6.118n2.

² But of class III in origin, see §6.130.

6.116 Several verbs of this class show the effects of loss of intervocalic [h] and hiatus. Thus, inf. *smēāgan* ‘consider’ reflects NSGmc **smauxō-jan*, whilst pres.ind.3sg. *smēaþ* reflects **smauxō-þ*. The following EWS paradigm for *smēāgan* may be reconstructed on the basis of forms of this verb and *þrēāgan* ‘afflict’:

Present	Indicative	Subjunctive	Imperative
Sg. 1	smēaġe	smēaġe	
2	smēast	smēaġe	smēa
3	smēað	smēaġe	
Pl.	smēaġað	smēaġen	smēaġað
Preterite			
Sg. 1	smēade	smēade	
2	smēadest	smēade	
3	smēade	smēade	
Pl.	smēadon	smēaden	
Infinitive	smēāgan		
Infl.inf.	to smēāganne		
Pres.part.	smēaġende		
Pa.part.	smēad		

Thus, there were two stems within the OE paradigm, *smēaġ-* and *smēa-*, parallel to *lofi(ġ)-* and *lofa-/lofo-*, and in all dialects but Kt and the dialect of PsGl(A), the latter stem could be substituted for the former, leading to innovations like Bo 41.146.21 *smēan* pres.subj.pl., Li *smēas* pres.ind.pl., *smēande* pres.part. Only in Li *smēaġe*, Ru2 *smēoġe* imper.sg. do we see replacement of the latter stem by the former, if these are not in fact infinitives. In Angl the diphthong that developed from PGmc **au* was smoothed before loss of [h]; but in INbr the diphthong of the alternative stem **smēa-* (or

smēo- in Ru2, see Hogg 1992b: §5.44) was consistently levelled into the smoothed stem *smēġ-*. Late Kt has OccGl 20.18 to *smȳāġenne* infl.inf. (see *ibid.*: §5.213) and 49.2 *smēġan* inf. (see *ibid.*: §5.119n1). Like *smēāġan* is *þrēāġan* (beside *þrēan*) ‘afflict’, to both of which analogical present stems *smēāġian*, *þrēāġian* were constructed.¹ Also like *smēāġan* is *hēān* ‘exalt’, to which no stem **hēāġan* is attested, just Bede 106.23 *hēān* inf. and OrW 43 *hēaþ* pres.ind.pl.,² also Bede 1 6.34.6 †*ġehēad* pa.part.³ But since **hēāġan* would have been smoothed to *hēġan* in Angl, some forms of the weak verb *hēġan* of the first class may actually be forms of the verb of the second class, see §6.99. Re-formed in Nbr according to the pattern of *smēāġan* is the strong verb *ġefēāġa* ‘rejoice’ (§6.62), with the stems *fēāġ-*, *fēoġ-* and *fēa-*, *fēo-*, the diphthong of the latter having been levelled into the former, originally **fēġ-*. The stems are not distributed on an etymological basis, and whilst some forms can only be weak, e.g. pret. *ġefēade*, none must be regarded as strong, though some are technically ambiguous, e.g. pres.ind.3pl. *ġefēað*. A weak pres.ind.3sg. *ġefēaþ* also occurs in Ru1, and various weak forms appear in LWS Psalter glosses derived from Anglian originals, e.g. PsGl(I) *ġefēāġaþ* pres.pl., *ġefēade* pret.sg.

¹ Cf. already in EWS GDPref and 4 (C) to *þrēāġianne*. On the introduction of velar /ŋ/ into these forms whereas there had been no such sound anywhere in the paradigm, see §6.118.

² Brunner (1965: §408A17) cites a pret. *hēade* which we are unable to authenticate.

³ The DOE text reads *ġehȳned* ‘humbled’, rendering Lat *sublimauit* ‘exalted’; *ġehēad* is found among the manuscript variants (T. Miller, 1890–8: II, 16).

6.117 Like *smēāġan* is *twēoġan* ‘doubt’ but with *ēo* where *smēāġan* has *ēa*. It is to be derived from **twioxō-ġan*, with pres.ind.3sg. *twēoð* < **twioxō-þ*, and thus the former stem corresponds to smoothed Angl *twīġ-* < **twihēj-*, whilst the latter may be *twēo-*, *twīo-* or *twīa-*, see Hogg (1992b: §5.44). In the Ru2 pret., the distinction between *twīade* < **twihadā* and *twīodun* < **twihudun* is maintained; cf. Ru1 *ġetwīodestu*. Like *twēoġan* is fragmentarily attested **tēoġan* ‘arrange’ < **tioxōġan*, not found in WS except in texts that show Angl influence.¹ The stem without *ġ* is attested in pres.pl. Beo 2526 *ġetēoð*, pret. *tēode*, *tīode*, CædN *tiadæ* (< **tihadā*), pa.part. *ġetēod*; the stem with *ġ* is found only in Bede 4 29.366.24 †to *tēāġenne*, †to *tēġenne* infl.inf.²

¹ Flasdieck (1935: 50–1, with references) and others would connect the attested forms of this verb with *tawian* ‘prepare’ (not *tāwian*: cf. ME *tauwen*, *tawe*, also Beo *gūð-*, *wīġ-ġetawum*, with *ā* confirmed by the metre), Got *tauġan* ‘make’, *tēwa* ‘order’, but the phonology of this seems intractable. See also Brunner (1965: §415(e)).

² These forms are manuscript variants listed by T. Miller (1890–8: II, 444).

6.118 Also contracted after loss of [h] is WS **sc̄(e)ōḡ(e)an* ‘don shoes’, to which the attested forms are *sceōge* pres.ind.1sg., *an-*, *on-*, *ge-scōgen* pres.subj.pl., *-scōd* pa.part., *sceō* imper.sg., †*sceōgeað* imper.pl.¹ This reflects the stems **skōxōj-* and **skōxō-*. In Nbr there occurs *ge-*, *gi-scōed* pa.part., with analogical *-ed*. In addition, in LWS there occur in LibSc and RegCGI forms like *sceōgian*, *sceōgiad̄*, *unsceōgien* in which <g> perhaps has the same hiatus-filling function as in the Ælfrician paradigm of *hēah* ‘high’, see §4.26, after the analogical introduction of *-ia-*, *-ie-* for etymological *-ga-*, *-ge-*. Such forms are then wholly parallel to *smēagian*, *prēagian*, §6.116. The unappealing alternative is to suppose that **lj/* was velarized before a back vowel, see Hogg (1992b: §7.29).² Of uncertain etymology, but inflected like *sceōgean*, is **bōḡ(e)an* ‘boast’,³ to which the distinctive attested forms are Vain 28 *bōð* pres.ind.3sg. and BenR 7.22.16 *bōde* pret.3sg.; there also occur analogical BenRApp 138.29 *bōgie* pres.subj.sg. and LibSc *bōgað* pres.ind.pl.⁴ Also of obscure origin is **gōḡ(e)an* ‘lament’, to which the attested forms are Bede 1 16.88.17 *gōiende* pres.part. and 16.88.15 *gōað* pres.ind.3sg., analogical for **gōð*: cf. corrupted *gæð*, *gēþ* amongst the manuscript variants (see T. Miller, 1890–8: II, 71).

¹ In London, British Library, Cotton Otho B. ii, as reported by Sweet (1871–2: 44).

² The alternative explanation is unappealing because the posited phonological rule would face many exceptions, e.g. *strēgan*, *čīgan*, *hmægan*. Without such a phonological rule, the chief difficulty as regards weak class II is how to explain *hergian* ‘harry’ < Gmc **xarjōjan*. Perhaps this is simply a matter of dissimilation, cf. §6.93n3, rendered plausible by the fact that *lj/* still alternated with *ly/* in IOE, e.g. in adjectives in *-iḡ*. It may be then that Or *hergean*, *hergeade*, *gehergead*, etc., represents the undissimilated stem.

³ There are no known Gmc cognates. The word has been derived from PGmc **bōjanan*, see Orel (2003: 51), with references, on the basis of the assumption that it contains the same stem as Lat **fōr* ‘I speak’ < **fā-y-ōr*, cf. Grk *φη-μί* ‘I speak’. This leaves the unumlauted root vowel unexplained.

⁴ Brunner (1965: §415(a)) and Campbell (1977: §761(7)) regard the last as analogous to the unattested alternative stem **bōḡ-*, and Campbell even sees the same stem in <*bogie*>, though surely <g> must represent a velar consonant before <i>. Rather, since *bōgað* occurs in the same text as *sceōgiad̄* above, most likely it and *bōgie* have the same explanation, i.e. with <g> introduced into the analogically induced hiatus.

6.119 Vowel contraction also occurred in stems that had PGmc **-ij-* before **-ō-*, since *lj/* was lost, with compensatory lengthening, see Hogg (1992b: §7.70), followed by loss of hiatus. The PGmc stem **frij-ōj-* ‘liberate, love’ thus produced Pre-OE **frī-ōj-*, which then developed to **frī-ej-* > **frī-ij-* (ibid.: §6.52) > *frīḡ-*, whilst the alternative stem without *lj/* after *lo:l*, **frij-ō-*, developed to **frī-ō-* > WS *frīo-*, *frēo-*. In WS, the diphthong of the latter stem was levelled into the former, producing a paradigm like that of *twēoġan*, with inf. *frēoġan*, pret.sg. *frēode*; Ru1 similarly has pres.subj.sg. *ġefrēoġe* as the sole recorded form to this verb in this text. In PsGl(A) the original distinction between the two stems is maintained, hence pres.ind.1sg.

ġefriġu, 2sg. *ġefrēos*, 3sg. *ġefrēað*, *ġefrēoð*, *ġefrīoð*, pl. *ġefriġað*, pret.3sg. *ġefrēode*, *ġefrēade*, *ġefrīode*, *ġefrēde*, imper.sg. *ġefrēa*, *ġefrīa*, etc. The mixture of spellings with <ea, eo, io> in the alternative stem suggests that contraction must have been early, before *-ad-* was generalized as the Angl dental suffix of the pret. and pa.part. In Nbr there is similarly much interchange of diphthongs that are otherwise generally kept discrete in that dialect, see *ibid.*: §5.138, e.g. Ru2 *ġifriāð*, *ġefrīoð* pres.ind.3sg., *ġifriād*, *ġifrīode* pa.part. But in some instances the present stem has been generalized as *frī-*, to which inflexions of the first weak class are added, hence DurRitGl *frīa* pres.ind.1sg., *ġifriē* pres.subj.sg., Li *frīende* pres.part. Probably constructed the same way is *ġefriēga* inf.¹ Compare also Li *frēweð* pres.ind.3sg., presumably representing **frēo-eð*, and cf. comparable *ġefrēouad* pa.part. In Li the stem *frīg-*, may be used the same way as *frī-*, hence *ġefriġeð* pres.ind.3sg., *ġefriġ* imper.sg., and it is even found once in the preterite, hence *ġefriġade*. Like *frēoġan* is non-Ælfrician *fēoġan* ‘hate’ < **fijōjan*,² except that the forms in PsGl(A) are not as regular. Ru1 keeps the two stems distinct, but in addition to etymological forms PsGl(A) has analogical *fīað* pres.ind.pl. beside regular *fīġað*, and analogical prets. *fīede*, *fīedon* beside etymological *fīode*, *fīodon*, etc., with *-að* and *-ed-* by analogy to class I. The stem variants in Nbr resemble those for *frēoġan*.

¹ Campbell (1977: §765) suggests that the spelling with <e> may be archaic, representing a stage before /e/ was raised before the following /j/, or that **frī-eġ-* did not develop to *frīġ-*, and spellings without <e> actually represent a verb stem of weak class III. Cognates show that the latter explanation is unlikely to be correct: see Orel (2003: 114). It is more likely that this is simply another instance of the use of a stem *frī-* with an analogically introduced ending: cf. how *-iġ-* also takes the form *-eġ-* in Li *fāġegas* pres.ind.3pl., *āġneġe*, *cunneġe*, *ġesyngēġe* infs., etc.

² Probably originally to class III, see §6.130.

6.120 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, weak verbs of class II include *andswarian* ‘answer’, *tācnian* ‘represent’, *wunian* ‘remain’,¹ *clypian* ‘call’, *luġian* ‘love’, *blētsian* ‘bless’, *hālġian* ‘sanctify’, *blissian* ‘rejoice’, *dafenian* ‘befit’, *rīxian* ‘rule’, *earnian* ‘merit’ and their derivates. In addition to these and the verbs listed in §§6.106–19, and excluding verbs transferred from weak classes I and III, some relatively common verbs in this very large class are the following: *acsian*, *ascian* ‘ask’, *bodian* ‘announce’, *ċēapian* ‘bargain’,² *ċeorian* ‘lament’, *costian* ‘tempt’, *cunnian* ‘test’,¹ *dwolian* ‘err’, *eahtian* ‘esteem’, *eardian* ‘dwell’, *endian* ‘end’, *fandian* ‘test’, *fundian* ‘attempt’, *ġearwian* ‘prepare’, *grāpian* ‘grasp’, *behōġian* ‘behave’, *holian* ‘hollow out’, *hopian* ‘hope’,³ *hwearġian* ‘turn’, *laðian* ‘invite’, *lēanian* ‘lend’, *lician* ‘please’,¹ *loccian* ‘entice’, *lōcian* ‘look’, *loġian* ‘praise’, *macian* ‘make’,⁴ *manian* ‘warn’, *meldian* ‘inform’, *offrian* ‘sacrifice’, *sammian* ‘assemble’, *sċ(e)amian* ‘shame’,¹ *sċēawian* ‘observe’, *teohhian* ‘determine’, *þaccian* ‘clap’, *þafian* ‘allow’,

þancian ‘thank’, *wandrian* ‘wander’, *warian* ‘beware’, *wealwian* ‘roll’, *weorðian* ‘honour’, *wincian* ‘blink’, *wīsian* ‘guide’, *wuldrian* ‘glorify’, *wundian* ‘wound’, *wundrian* ‘be amazed’, amongst many others. A few recognizable suffixes were used to form verbs of this class. Verbs derived from adjectives in *-ig* were listed above, see §6.115; some other particular groups are these:

- (i) verbs in *-(e)cian*, including *bedecian* ‘beg’ (cf. *biddan* ‘ask’), *astýfecian* ‘suppress’, *aswefecian* ‘extirpate’, *elcian* ‘delay’ (cf. CP (C) 33.220.8 *ieldcað*), *gearcian* ‘prepare’ (cf. *gearo* ‘ready’);
- (ii) verbs in *-(e)nian*, including *gedafenian* ‘befit’ (cf. *gedēfe* ‘fitting’), *fæg(e)-nian* ‘rejoice’ (cf. *fæge* ‘popular’),⁵ *fæstnian* ‘fasten’ (cf. *fæst* ‘firm’), *hafenian* ‘hold’ (cf. *habban* ‘have’), *lācnian* ‘heal’ (cf. *lāce* ‘doctor’), *op(e)nian* ‘open’ (cf. *upp* ‘up’), *war(e)nian* ‘warn’ (cf. *warian* ‘beware’), *wilnian* ‘desire’ (cf. *willa* ‘desire’), *wītnian* ‘punish’ (cf. *wīte* ‘punishment’);
- (iii) verbs in *-(e)sian*,⁶ including *blētsian* ‘bless’, *blīðsian*, *blissian* ‘rejoice’, *clānsian* ‘cleanses’, *ef(e)sian* ‘clip’, *eġ(e)sian* ‘threaten’, *feorsian* ‘expel’, *ġītsian* ‘covet’, *grimsian* ‘rage’, *behrēowsian* ‘repent’, WS *mārsian* ‘glorify’, *mīltsian* ‘pity’, *rīcsian*, *rīxian* ‘rule’, *unrōtsian* ‘worry’, *untrēowsian* ‘disbelieve’, *yrnian* ‘rage’.

On the transferral of verbs from class I to class II, see §6.80 in regard to verbs like *nerian*, §6.88 in regard to verbs like *lemian*, §6.96 in regard to verbs like *timbrian*. On the transferral of verbs of class III to class II, see §§6.129–30.

¹ In origin a verb of class III, see §6.130.

² Perhaps originally to class III, see §6.130.

³ Probably a relatively late addition to the vocabulary rather than an exclusively WS word: see Fulk (1992: §367&n147).

⁴ Very rare in Engl., cf. LkHeadGl (Li) 26 *ġemacade †ġemacað*. See Kuhn (1986).

⁵ Apparently a West Saxon word: see Wēnisch (1985).

⁶ On these verbs in *-sian*, see Hallander (1966).

3 Weak class III

6.121 Verbs of the third weak class in Germanic are in origin structurally parallel to those of the second weak class, but with PGmc **-ǣ-* (PIE **-ē-*) rather than **-ō-* as the stem formative. They are thus of the type Lat *sedēre* ‘sit’ of the second conjugation. Presumably, the present stem was formed by adding PIE **-y-* + inflexion to the stem in **-ē-*, but precisely how the present paradigms in the various Gmc languages are to be derived this way is a matter of intense debate.¹ The preterite, too, presents problems, since we should expect the pret. stem to have been formed with PGmc **-ǣ-*, to which the dental suffix was added directly, as in the parallel instance of weak class II; but the pret. in NSGmc shows no trace of this posited **-ǣ-*.

In WGmc, at least, extensive analogical re-formation appears to be the best explanation for the attested forms. Certainly, in OHG, verbs of this class have been re-formed so that the stem ends in *-ē-* in all forms, parallel to verbs of class II, in which the formative is *-ō-* in all forms.²

¹ Prokosch (1939: §§54g, 67g), Dishington (1976, 1978) and Shields (1988) make unpersuasive cases for non-analogical origins of the alternations in the present stem; for an opposing view, see Jasanoff (1973). Flasdieck (1935) offers extensive bibliographical coverage of the earlier literature. On the earlier history of the type in Germanic, see Kortlandt (1990).

² For an enlightening discussion of forms outside of WGmc, see Bennett (1962).

(a) *Inflexions*

6.122 There are just four verbs in OE that may be said extensively to represent inflexion according to weak class III. These are WS *habban* 'have', *libban* 'live', *secġ(e)an* 'say', *hycġ(e)an* 'think', as illustrated by the following EWS paradigms:

Present Indicative				
Sg. 1	<i>hæbbe</i>	<i>libbe</i>	<i>secġe</i>	<i>hycġe</i>
2	<i>hæfst</i>	<i>leofast</i>	<i>sæġst</i>	<i>hyġst</i>
3	<i>hæfð</i>	<i>leofað</i>	<i>sæġð</i>	<i>hyġð</i>
Pl.	<i>habbað</i>	<i>libbað</i>	<i>secġað</i>	<i>hycġað</i>
Present Subjunctive				
Sg.	<i>hæbbe</i>	<i>libbe</i>	<i>secġe</i>	<i>hycġe</i>
Pl.	<i>hæbben</i>	<i>libben</i>	<i>secġen</i>	<i>hycġen</i>
Imperative				
Sg.	<i>hafa</i>	<i>leofa</i>	<i>sæġe</i>	<i>hyġe</i>
Pl.	<i>habbað</i>	<i>libbað</i>	<i>secġað</i>	<i>hycġað</i>
Preterite Indicative				
Sg. 1	<i>hæfde</i>	<i>lifde</i>	<i>sæġde</i>	<i>hogde</i>
2	<i>hæfdest</i>	<i>lifdest</i>	<i>sæġdest</i>	<i>hogdest</i>
3	<i>hæfde</i>	<i>lifde</i>	<i>sæġde</i>	<i>hogde</i>
Pl.	<i>hæfdon</i>	<i>lifdon</i>	<i>sæġdon</i>	<i>hogdon</i>
Preterite Subjunctive				
Sg.	<i>hæfde</i>	<i>lifde</i>	<i>sæġde</i>	<i>hogde</i>
Pl.	<i>hæfden</i>	<i>lifden</i>	<i>sæġden</i>	<i>hogden</i>
Infinitive	<i>habban</i>	<i>libban</i>	<i>secġan</i>	<i>hycġan</i>
Infl.inf.	<i>to habbanne</i>	<i>to libbanne</i>	<i>to secġanne</i>	<i>to hycġanne</i>
Pres.part.	<i>hæbbende</i>	<i>libbende</i>	<i>secġende</i>	<i>hycġende</i>
Pa.part.	<i>hæfd</i>	<i>lifd</i>	<i>sæġd</i>	<i>-hogd¹</i>

In the inflected infinitive, *-anne* is generally commoner in this class than *-enne*. In *habban*, the stem *habb-* is very frequent for *hæbb-* in LWS; the reverse substitution occurs much less frequently. Forms of *habban* with gemination must have contained **-j-*, and the absence of umlaut is thus unexpected. Very likely *æ* was levelled from the preterite into the present, where it could then develop to *a* before a back vowel, as argued by Bammesberger (1992b). *Habban* has an alternative pa.part., Bede 5 19.469.6 *hæfed*, in the Cambridge manuscript, and the same stem appears in the pret. several times in Sol I, once in Solil 2, and once in ArPrGl 1 as a pa.part. Likewise, the derivative *forhabban* ‘refrain’ has a form Dan 147 *forhæfed* pa.part. (cf. the usual pret. *forhæfde*), and the very frequent nominal *forhæfedness* ‘temperance’ evidences this alternative participial form, as do the nouns *behæfedness*, *nēdbehæfedness*. But *forhæfdness* is commoner, and it may be that the stem *hæfed-* originates in the noun, where the unusual consonant cluster *-fdn-* perhaps led to epenthesis. In *libban*, the vowel /i/ is sometimes extended to all forms of the present in LWS. Also in LWS, the preterite has extensively been re-formed using the stem *leofod-*, consistently in Ælfric, as if to a verb of class II. In *secgan*, the umlauted vowel /e/ is in LWS more often than not extended to forms of the present in which EWS has /æ/. In LWS and PsGl(A), the pret. stem of *hycgan* is more commonly formed according to class II, hence *hogod-*, *hogad-*, and present forms based on *hogian* are common in both dialects, appearing already occasionally in EWS. Conversely, occasionally in LWS, especially in some of the Psalter glosses of Anglian origin (PsGl(D, E, F, G, H, I, J, K)), *forhycgan* ‘despise’ has a pret. stem *forhyg(e)d-*, *forhig(e)d-*. On the pret. and participial stem *sæd-* in WS, see Hogg (1992b: §5.128).

¹ PsGl(A) 118.141 *forhogd*, Bede 4 26.354.21 *forhogdre*, etc.

6.123 As with the strong verbs, plural verb endings are generally reduced to *-e* before pronouns of the first and second persons in WS, less regularly in Angl, see §6.7. Present and past participles are declined the same way as the corresponding participles of weak class I, see §§4.28–9.

6.124 There are notable inconsistencies amongst the paradigms presented in §6.122, particularly in regard to whether there is syncope in the pres.ind.2&3sg., whether and where umlaut is found in the verb root, and what the inflexion of the imper.sg. is. In reconstructing the NSGmc paradigms from which the OE paradigms develop, it is probably best to assume that in cases of such inconsistency, variation is due to analogical re-formation on the model of verbs of class I or II, and the forms least like those to be found in classes I and II are likeliest to be original. Accordingly, early NSGmc paradigms of the following sort may be reconstructed:

		Present Indicative			
Sg. 1	*xavvjō	*libbjō	*sa33jō*	*xu33jō	
2	*xavais	*libbais	*sa3ais	*xu3ais	
3	*xavaiþ	*libbaiþ	*sa3aiþ	*xu3aiþ	
Pl.	*xavvjaþ	*libbjaþ	*sa33jaþ	*xu33jaþ	
		Present Subjunctive			
Sg. 3	*xavvjai	*libbjai	*sa33jai	*xu33jai	
Pl.	*xavvjain	*libbjain	*sa33jain	*xu33jain	
		Imperative			
Sg.	*xavai	*libbai	*sa3ai	*xu3ai	
Pl.	*xavvjaþ	*libbjaþ	*sa33jaþ	*xu33jaþ	
		Preterite Indicative			
Sg. 1	*xavdā	*libdā	*sa3dā	*xu3dā	
2	*xavdāes	*libdāes	*sa3dāes	*xu3dāes	
3	*xavdā	*libdā	*sa3dā	*xu3dā	
Pl.	*xavdun	*libdun	*sa3dun	*xu3dun	
		Preterite Subjunctive			
Sg. 3	*xavdī	*libdī	*sa3dī	*xu3dī	
Pl.	*xavdīn	*libdīn	*sa3dīn	*xu3dīn	
Infinitive	*xavvjan	*libbjan	*sa33jan	*xu33jan	
Infl.inf.	*xavvjannjai	*libbjannjai	*sa33jannjai	*xu33jannjai	
Pres.part.	*xavvjandī	*libbjandī	*sa33jandī	*xu33jandī	
Pa.part.	*xavdaz	*libdaz	*sa3daz	*xu3daz	

In early PGmc there must have been an alternation between, e.g., pres.ind.1sg. *libæjō, 3sg. libæjþ(i). If the analysis of the development of class II offered in §6.108 is correct, */j/ would have been lost in these, with subsequent vowel contraction. What the result would have been in the former is difficult to determine, but the resulting *-æi- in the latter may plausibly be assumed to have produced NSGmc *-ai- in libaiþ. Whatever the result was in the former stem, the stem formative was a vowel, not a diphthong, and so the same sort of paradigm allomorphy as in class II is to be assumed. Accordingly, just as in class II, inflexions with initial *-j-, borrowed from heavy stems of class I, see §6.108, were substituted in NSGmc for the anomalous endings that had resulted from the contraction of *-æ- plus vowel in PGmc. That is, the stem in NSGmc was perceived to be lib-, with endings in an initial long vowel in pres.ind.1sg., 3pl., inf., etc., and endings in *-ai- in pres.ind.2&3sg. and imper.sg. To this stem the analogical inflexions with *-j- were added in the same forms as in class II, but, also as in class II, the forms of the pres.ind.2&3sg. and imper.sg., those with *-ai-, were left unaltered. It is to be assumed, then, that at this very early

stage of NSGmc the WGmc rule of gemination was still productive, see Hogg (1992b: §§4.11–14), and this accounts for the forms with geminates in the above paradigms. This analysis also explains the preterite forms, since forms like pa.part. *hæfd*, *hogd* cannot be very ancient, as the consonant clusters in them are uncharacteristic of inheritances from very early times, cf. Prokosch (1939: §67g). That is, if such forms were old, we should expect **sæhte*, **gehohht* rather than *sægde*, *gehogd*, on the evidence of *sōhte*, *geworht*, etc., see §6.100.^{1,2} If the stem was analysed as **liþ-*, and the present stem displayed no characteristic connecting vowel like **-ō-* in class II, it may be assumed that forms like pret.sg. **liþ-dæ*, pa.part. **liþ-daz* arose relatively late, i.e. in NSGmc, replacing earlier forms in which there was a vowel, the reflex of Gmc **-æ-*, before the dental suffix.

¹ For this reason the evidence of occasional seeming relics like OHG *hapta* beside usual *habēta* is not particularly persuasive as regards the antiquity of preterites of this class without connecting vowel, though Campbell (1977: 342&n4) finds otherwise.

² Bammesberger (1985b, 1987) instead regards the stem **habd-* as quite old, and he reconstructs a PIE instrumental **kapH-*, to which forms of ‘do’ were attached in the preterite in Gmc, to account for the unusual development of the consonants.

6.125 Several analogical changes must be assumed to have intervened in the development of the NSGmc paradigms in §6.124 into the OE paradigms in §6.122. Umlaut should have applied to present forms with inflexions in **-j-* but not those in **-ai-*. The resulting allomorphy is preserved in *secġan*, but the umlauted vowel was levelled away in *habban* (very likely to prevent neutralization with strong *hebban* ‘raise’) whilst, conversely, the umlauted vowel was extended throughout the present of *hyġgan*. In the present forms without **-j-*, **ai* should have developed to **æ* and then undergone shortening but not syncope. However, as in strong verbs and weak verbs of class I, syncope may be assumed to have applied in WS in the pres.ind.2&3sg. when a pronoun followed, and syncopated forms were then generalized to other syntactic environments in *habban*, *secġan*, *hyġgan*, see §6.14. Syncope is to be expected in WS in light stems ending in non-sonorant consonants, see §6.12. The inflexions **-ais*, **-aiþ* cannot be reflected directly in *leofast*, *leofað*, since **ai* should not produce OE *a* in unstressed syllables; these endings must have been borrowed from class II, an unsurprising development in view of changes to this class discussed below, see §6.129.¹ Likewise, the endings of the imperatives *leofa*, *hafa* must have been borrowed from class II, whilst *sæge*, *hyge* may retain the original ending. Note that *leofast*, *leofað*, *leofa* show back umlaut.

¹ OSax *libbian* ‘live’ likewise has pres.ind.3sg. *liþod*, like a verb of class II, as opposed to *hābed*, *hābad*, to *hebbian*, *habbien* ‘have’.

6.126 In Angl, and sometimes in poetry, the inflexion *-o/-u* is used in the pres.ind.1sg., see §6.11, except in Ru1, which has *sæcge*, *secge*. In Nbr, the stem to which this inflexion is attached is without gemination, hence Li *hafo*, *liofo*, *sægo*. In the pres.ind.2&3sg. there is no syncope in Angl, hence, in the 2sg., PsGl(A) *hafast*, *asagas*, Ru1 *hæfest*, *sægest*, Li *hæfes*, *liofað*, *lifeð*, *sæges*, *forhogas*, etc. Of these, the forms in PsGl(A), in addition to which there occur 3sg. *hafað*, *forhogað*, show substitution of endings from class II, although there also occurs 3sg. *segeð*. Similar substitution has applied to *hycgan* in Nbr.¹ Unsyncopated forms like *hæfest*, *sægeð*, *segeð*, *hygeþ* occur in LWS only in texts showing other Angl features or, rarely, in late copies of Ælfrician material, e.g. ÆHomM 1 (Bel 9) 71 *hæfeð*, ÆHom 14.86 *sægeð*.

¹ Also in Nbr, the stem of the pres.pl. may appear alternatively in the 3sg., hence Ru2 *sæcgað*, Li *forhycað* and, conversely, Li *sægas* pl.

(b) *Stems*

6.127 The stem *libb-* is native to WS, whereas in eKt¹ and Angl the stem lacks gemination, taking the form *lifġ-*, *lifi(ġ)-*. This cannot be simply a matter of re-formation of the verb so as to belong to class II, since the spelling with non-syllabic *ġ* is too common, especially in PsGl(A), in which a careful distinction is drawn between, e.g., class I *herġan* and class II *lufian* by the use of <g> and <i>. It would appear that *lifġ-* is an alternative development of NSGmc **libj-*, in which gemination failed. This seems to confirm the assumption that the stem **libj-* is a NSGmc innovation, formed at a time when the WGmc rule of gemination was losing its operationality, with the result that gemination is not found in all dialects. The stem *lifġ-* is also poetic, and it appears in LWS texts that display other Angl features, as well as rarely in EWS, under Merc influence, thus CP 5.43.22 *lifendān*, ChronA 718 *lifġendum*. It also appears in Ælfrician and other LWS homiletic texts only in deific formulas of the type *ðām lifġendan drihtne*, *his lifġendan fæder*, etc. The artificial, literary nature of this usage is confirmed by the observation that in such texts the stem is never spelt *lifġ-*, always *lifġ-* or *lifi-*. An analogical stem *leofi-*, with the diphthong proper to the stem without *-i-*, occurs in the Blickling Homilies and in Nic (C).

¹ Cf. Ch 1200 (HarmD 7) 6 *lifġe*; also Ch 1197 (HarmD 4) 18 *an Godes libġendes naman*, with non-syllabic <g>: cf. the discussion of the formula below. There also occur participles *lifġende*, *lifi(ġ)ende* in KtPs.

6.128 There is a negated form *nabban* ‘not have’ parallel in its forms to *habban*, as a result of contraction of *ne + habban*, see Hogg (1992b: §5.152). In Angl, uncontracted constructions of *ne* followed by forms of

habban are not infrequent, though the contracted forms still predominate. In WS, on the other hand, uncontracted forms are vanishingly rare.¹ That the contracted form has been morphologized is demonstrated by Bo 20.36 †*genæfd* pa.part.²

¹ For discussion of origins and distribution, with references, see Fulk (1992: §§147–55), and Jack (1999). On problems associated with identifying the dialect range of contraction, see Hogg (2004).

² Only in Oxford, Bodleian Library, Bodley 180, of the early twelfth century, as reported by Godden and Irvine (2009: I, 268.40).

6.129 The verbs *habban*, *libban*, *secgan*, *hycgan* are all amongst the 100 verbs most frequently encountered in the MCOE, see §6.5. As cognates demonstrate, however, this class once included many more verbs. Whilst most forms of these other verbs have adopted the inflexional patterns of class I and, especially, class II, a few older forms survive from the original class III paradigms, listed in §6.130.¹ The telltale signs of original inflexion according to class III are these: (a) co-occurrence of forms with and without umlaut; (b) co-occurrence of forms with and without gemination; (c) syncope before the dental preterite suffix in light-stemmed verbs and in verbs otherwise inflected in accordance with class II; (d) spellings with *-ġ-* instead of *-i-* or *-iġ-* in verbs that otherwise appear to be of class II.^{2,3} None of these features is infallible as an indicator of origins in class III. In regard to feature (a), Li *ym(b)scēawde* exemplifies a verb of class II given a preterite form like a verb of class III, see §6.113. As regards feature (b), authentic verbs of class II are occasionally spelt with *-ġ-* rather than *-i(ġ)-* in the present stem, see §6.106n2. Features (c) and (d) may indicate nothing more than verbs of classes I and II formed from the same PIE root, e.g. *tellan* alongside *talian*, both ‘count’. Moreover, feature (d) is unreliable in connexion with Anglian inflected infinitives and present participles of light-stemmed verbs, in which *-i-* should have been syncopated, see §6.112.⁴ It is therefore expedient, when possible, to compare cognates before assuming origins in class III. Gothic weak verbs in *-an* (as opposed to *-jan*, *-ōn*, *-nan*) and OHG verbs in *-ēn* are particularly diagnostic. There is also evidence for transferral of some of these verbs between weak classes in Old Saxon, see Holthausen (1921: §466A1).

¹ This pattern of defection must date to the NSGmc period, as in OSax only the cognates of *habban*, *libban*, *secgan* are regularly inflected according to class III, with a few relic forms of other verbs. In OFris only the cognate of *habban* retains marks of class III inflexion. Many more verbs of class III appear in OHG.

² Brunner (1965: §417A11) includes amongst the signs of class III membership alternation between *æ* and *a* in the root syllable, but, as his examples illustrate, it is only in conjunction with other features that this can be seen to have significance. See the discussion of *plegian* and *sparian* in §6.130 below.

³ Brunner (1965: §417A6) rightly remarks that *-e* in the imper.sg. of verbs of class II ought to be a sign of origins in class III; cf. *sæge*, *hyge*. But we have not noticed

many examples in texts in which there is not much confusion of unstressed final vowels, as especially is the case in lNbr. However, *-e* (9×; once *-æ*) is nearly as common as *-a* (13×) in verbs of class II in Ru1, whilst class III has only *-e* (4×), *-Ø* (1×), according to Brown (1891–2: II, §29). Yet some of the verbs with *-e* in Ru1 plainly cannot have originated in class III, e.g. *fultumian*, *mitsian*. The same problem of insecure unstressed vocalism attends the inflexions *-est*, *-eð* in the pres.ind.2&3sg., cf. Campbell (1977: §766).

⁴ This eliminates from consideration forms like HomS 17 (BlHom 5) 106 *bifgendan* pres.part., MtGl (Ru) 8.14 *bifgende* to *bifian* ‘tremble’; CorpGl 2 13.272 *geongendi* pres.part. to *ginian* ‘yawn’; CorpGl 2 9.207 *widerhlingende*, GuthB 1147 *hlingendne*, Li *hlingende*, etc. to *hlinian* ‘lean’; CorpGl 2 4.64 *seobgendum* pres.part. to *seofian* ‘lament’; and others. But there is sometimes other evidence in regard to these verbs, see §6.130.

6.130 Verbs that display one or more of the features listed in §6.129 as indicating likely original inflexion according to class III are the following, with the relevant forms cited:

bism(e)rian ‘mock’: MtGl (Li) 27.41 *bismerdon* pret.pl., but cf. §6.96 concerning Nbr *timberde*.

būan ‘settle’: The Nbr form is umlauted *bȳa*, and the WS pret. *būde* lacks umlaut. Cf. Got *baúan* (class III), but see also §6.72n1.

cēapian ‘bargain’: Cf. LWS *cȳpan*. Gothic has only *káupōn*, OHG only *koufen*, and ON *kaupa* has irregular pret. *keypta*. But this may be simply a matter of co-occurrence of PGmc **kaupjanan* and **kaupōjanan*, as Orel (2003: 211) assumes.

drūgian ‘become dry’: MtGl (Li) 21.20 *drūgde* pret.3sg.; also umlauted forms, e.g. Li *drȳgeð*; but the umlaut could be due to confusion with *drȳgan* ‘cause to become dry’.

fetian ‘fetch’: WS has frequent forms from the stem *fec̥-*, from earlier **fet̥g-*, see Hogg (1992b: §7.33), along with stem *fett-* in pret. and pa.part. There are also unumlauted forms: Sat 519 *gefatian* inf., LkGl (Li) 20.35 *fatas* pres.ind.3pl., HomU 36.25 *fatige* pres.subj.sg.

folgian ‘follow’: Parallel to this is class I *fylgan*. Campbell (1977: §763n4) regards this as an example of independent construction of verbs of classes I and II from different forms of a single PIE root, but cf. OHG *folgēn*. OSax *folgan* similarly shows signs of transferral, according to Holthausen (1921: §466A1).

giūwian ‘ask’: DurRitGl *giwgað* pres.ind.pl., LkGl (Li) 19.23 *giuige* inf., MkGl (Li) 6.24 *giuige* pres.ind.1sg., pret. Li *giude* (3×). Brunner (1965: §417A12(b)) compares OHG *giwēn*, which appears once in Bavarian, beside usual *gewōn* ‘gape’.

hatian ‘hate’: cf. the derivatives *hettend* ‘enemy’ (in poetry) and *onhetting* ‘persecution’. Cf. Got *hatan* (but also *hatjan*). In OSax there is also evidence of transferral, according to Holthausen (1921: §466A1).

hlinian ‘lean’: CorpGl 2 9.416 *onhlingo* pres.ind.1sg. Cf. OHG *hlinēn*.

lēoran ‘depart’: The word is more often than not spelt with <io> in Nbr, probably umlauted, see Hogg (1992b: §5.84).

leornian ‘learn’: Frequently spelt with <io> in Li, probably umlauted, see *ibid.*: §5.84; also CP 27.187.17 *geliornġen*. Cf. OFris *lerna*, *lirna*, OHG *lernēn*, *lirnēn*.

losian ‘perish’: DurRitGl 1 41.1 *loesia* inf., Ru2 *loesġa* inf., *loesġe* pres.ind.1sg., etc. Transitive *losian* ‘destroy’ similarly shows forms with umlaut and/or -ġ-, e.g. Ru2 *loesġa* inf.

murnan ‘mourn’: And 37 *murndan* pret.pl. Cf. Got *maúrnan*, OHG *mornēn*. OSax *mornan* likewise shows signs of transferral, according to Holthausen (1921: §466A1). Cf. §6.52 on strong forms, which are probably the result of the virtual elimination of class III.

plegian ‘move rapidly’: MtMarg(Ru) 11.17 *plagadun*, PsGl(A) *plæġiað*, *plæġiendra* (with second fronting, Hogg, 1992b: §5.89), Li *plæġade*, etc., beside class I *plegan*; see also §6.106n1. On strong forms in the pres., see §6.64. The creation of strong forms is understandable, given that *plegan* is anomalous as a stem of class I: cf., e.g. *weġġan*, pret. *weġede*.

onscunian ‘shun’: PsGl(A) 106.10 *onscynedun* pret.pl. Nbr forms like DurRitGl 1 50.2 *onscynia* are indecisive because of palatalization, see *ibid.*: §5.68.

rūmian ‘become clear of obstructions’: cf. *rȳman* ‘clear’. OSax *rūm(i)an* also presents evidence of transferral (pret. *rūmde*).

sorgian ‘sorrow’: EpGl 81 *soġġendi* shows umlaut, as does Orm’s *serrzġhenn* and occasional ME *ser(e)wen*. Cf. Got *saúrġan*, OHG *sorgēn*. OSax *sorgan* likewise show evidence of transferral, according to Holthausen (1921: §466A1).

andspurnian ‘offend’: Nbr *ondspurniġa* has many forms with umlaut, e.g. Li *onspyrnað* pres.3sg., *ondspyrnende* pres.part. But this could be due to the influence of ON *spyrna*, or OE *spyrnan* ‘stumble’.

swigian ‘be silent’: Li, Ru2, Mart 2, Mart 5.1, PsGl(H, J) *swiġde*, *oðswiġde*, *ġeswiġdon*, etc. See §6.114&n2 on the vowel quantity and other matters. Cf. OHG *swiġēn*.

tilian ‘cultivate’: CP and poetry, etc., show a stem in *tilġ-* outside of the infl.inf. and pres.part. Cf. OHG *zilēn*, *zilōn*, but Got only *ga-tilōn*.

truwian, *trugian* ‘trust’:¹ CP 65.463.23 *fortruwdes*, JnGl (Ru) 2.24 *ġitryġade*. Cf. Got *trauan* (class III),² OHG *trūēn*; but cf. Flasdieck (1935: 53).

þēowian ‘serve’:³ PsGl(A) *ðiwġen* pres.subj.pl., *ðēawde* pret.3sg., *ðēowdun* pl., Bede 5 9.408.25 *þeogende* pres.part., *þēo(w)de* pret.sg., Ælfric *þēowde*. Cf. Got *ana-þiwan*.

þolian ‘endure’: DurRitGl 1 36.11 *ġiðoeliġa* pres.subj.pl., Ru2 *ġiðoelġas* pres.ind.3sg., *ġiðoeliġas* imper.pl., *ġiðoelġa* inf. Cf. Got *þulan*, OHG *dolēn*. OSax *tholian*, *tholon* likewise shows evidence of transferral, according to Holthausen (1921: §466A1).

untrumian ‘ail’: Nbr forms usually have umlaut, e.g. Li *untrymade* pret.3sg., but cf. JnGl (Ru) 11.2 *untrumade*. But this may be due to the influence of the adj. *untrymiġ* ‘infirm’: note forms like pa.part. *geuntrumad* rather than **unġetrumad*.

wacian ‘keep vigil’: Ru1, Nbr *wæcca* inf., etc., poetic *wæccende* pres.part. Cf. Got *wakan*, OHG *wabhēn*.

wīsian ‘guide’: Dan 35 *wīsde*.⁴ Possibly the geminate in LWS *wissian* ‘guide’, beside usual *wīsian*, is to be explained on this basis. Cf. OHG *wīsēn* in Otfrid, beside usual *wīsōn*.

wunian ‘remain’: MtGl (Ru) 10.11 *wynigap* imper.pl. Cf. Got *un-wunands* pres.part., OHG *wonēn*.

ȳwan ‘show’: The usual Angl form is unumlauted *ēawan*, pret. *ēawde* (beside *-ēawade*), which also occurs in EWS CP 28.195.18 †*ġeēawde*,⁵ see §6.97n6. Cf. OHG *ougen* alongside Got *āugjan*, to class I.⁶

A few other verbs that possibly originated in class III may be mentioned. *Sparian* ‘spare’ has fronted /æ/, which would have appeared only if the following syllable did not contain a back vowel, in DurRitGl *spæria* inf. and other forms, whilst PsGl(A) *spearað* pres.ind.3sg. and similar forms show back umlaut of */æ/ due to a following back vowel. The alternation between front and back vowels in the second syllable is not to be expected in verbs of class II unless they have relic forms from class III. Cf. OHG *sparēn*. *Ġetrēowan* ‘trust’ has in Li, beside normal *ġetrēou-*, *ġetrīow-*, a stem *ġetrēw-*, and this could be due to the same sort of cause as in *lēoran* above.⁷ The verbs *si(o)wian* ‘sew’ and *strēawian* ‘strew’ have alternative forms inflected according to class I, e.g. EpGl 563 *bisiuudi* pa.part., Beo 2436 *strēd* pa.part., see §§6.97n4, 6.98, but there is no supporting comparative evidence. OE **dofian* is attested only by CorpGl 2 4.46 *dobġendi* ‘in dotage’ (*dobend-* in other glossaries), which is inconclusive on account of the Angl syncope of *-i-* in such forms, see §6.112; but cf. OHG *tobēn*. A number of other verbs can be identified as possibly having originated in class III on the basis of cognates alone:⁸ *bealdian* ‘be bold’ (OHG *ir-baldēn*), *bifian* ‘tremble’ (OHG *bibēn*), *clifian* ‘cleave’ (OHG *klebēn*), *cunnian* ‘test’ (Got *ga-kunnan*), *ealdian* ‘grow old’ (OHG *altēn*), *earmian* ‘pity’ (Got *arman*), *fæstan* ‘fast, hold firm’ (Got *fastan*), non-Ælfrician *fēogan* ‘hate’ (Got *fijan*; see §6.119),⁹ *fūlian* ‘rot’ (OHG *fūlēn*), *ġinian* (OHG *ġinēn*), *hangian* ‘be hanging’ (OHG *hangēn*), *holian* ‘hollow out’ (OHG *holēn*),¹⁰ *lician* ‘please’ (Got *leikan*), *sc(e)amian* ‘be ashamed’ (Got *skaman*), *ġearfian* ‘be in need’ (OHG *darbēn*), *bewitian* ‘observe’ (Got *witan*); perhaps also Nbr *chlyniga* ‘wrap’, cf. ON *klunna* ‘cling’.

¹ On the variation between <w> and <g>, cf. *suwian*, *sugian*, §6.114n2.

² For the vocalism, cf. Got *bauan* alongside OE *būan* ‘settle’, see §6.72, and compare the view of Orel (2003: 411).

³ On the variable quantity in *þǿowian*, see Fulk (1992: §§162–9).

⁴ The manuscript has <wisðe> for *wisde*, probably indicating that the scribe did not understand *<wisde> in his exemplar. The metre is indecisive.

⁵ The form in CP is reported by Sweet (1871–2) in London, British Library, Cotton Otho B.ii.

⁶ The cognates, even as close as OSax *ōgan*, indicate derivation from the PGmc root **aug-*, as in OE *ēage* ‘eye’, though the early loss of */ɣ/ (see Hogg 1992b: §3.18n1) is difficult to explain. The hypothesis that the form is to be derived from an entirely different PGmc stem without */ɣ/ (see Flasdieck, 1935: 64, with references) is difficult to credit.

⁷ So Sievers (1900: 35); cf. Flasdieck (1935: 49).

⁸ Just one cognate is offered for each verb.

⁹ But probably not *frēoġan* ‘love’; cf. Got *frijōn*.

¹⁰ The usual forms in OHG are *halōn*, *bolōn*; the form *bolēn* appears in Otrifrid. The verb also shows evidence of transferral in OSax, according to Holthausen (1921: §466A1).

IV Preterite-present verbs

6.131 There existed in PGmc a small but mostly rather frequent group of verbs that were originally strong throughout the paradigm, but which for semantic reasons developed in such a way that their preterites came to be used in present contexts and thus came to be regarded as present forms.¹ For example, OE *wāt* pres.1sg. ‘know’ reflects PGmc **wait*, originally an unreduplicated perfect, having *o*-grade of the PIE root **wid-* reflected in reduced grade in Lat *video* ‘I see’. That is, the sense ‘I know’ developed from the sense ‘I have seen’.² That this semantic development is ancient is indicated by the fact that *wāt* has exact cognates with the same meaning, Grk *οἶδα*, Sanskrit *vēda* < **woid-a*, indicating that the reduplicative syllable had already been lost by the time of late PIE.³ The number of such verbs is larger in Gmc than in any other IE language family, and several of the relevant verbs must have been added to the class in PGmc. Another innovation of Gmc is the rise of a new set of preterites for such verbs, in part comparable to the preterites of weak verbs, formed by the addition of a dental suffix. This small class of verbs plays an outsize role in OE grammar (as the reflexes of several do in PDE) because some serve as auxiliaries (see Mitchell, 1985: §§990–1024), whilst others express basic concepts. It is a valid question whether there remained enough cohesion to this class of verbs in OE to justify their treatment as a separate class in a synchronic grammar.⁴ But they are unified inasmuch as they are the only verbs (excepting, in part, the verb ‘to be’) bearing preterite inflexions in the present tense. That they were recognized as a class is also suggested by their ability to exert analogical influence on other anomalous verbs in relatively recent prehistory, for instance on *earth* (§6.150) in prehistoric WS and *wilt* (§6.161) in Anglo-Frisian. Disintegration of the class, however, is indicated by the

incipient substitution, in present forms, of non-preterite endings in Nbr, see §6.134.

¹ On the origin and development of the preterite-present verbs in Gmc, see Birkmann (1987), where, however, the OE developments receive little attention.

² For semasiological parallels, cf. Lat *memini*, *nōvī*, *coepī*.

³ There must originally have been reduplication in this verb, for reasons explained by Szemerényi (1996: 9.4.3(b)). This contradicts the account of Prokosch (1939: §65), who regards the lack of reduplication as an archaism.

⁴ Colman (1992) reaches a negative conclusion to this question on the basis of certain unpredictable features, such as the form of the preterite in relation to the present and the form of the pres.ind.2sg.

1 *Inflexion and classes*

6.132 It is conventional in laying out the paradigms of such verbs to classify them according to the strong class to which each would have belonged if it had developed normally as a strong verb. The paradigms below are somewhat abbreviated, since many forms are entirely predictable. Thus, the subjunctive plural is regularly in *-en*, except insofar as this is replaced by *-on* in LOE, and by inflexions without final *-n* in Nbr and Ru1, see §6.23. Likewise, the endings of the pret.ind.2&3sg. are *-est*, *-e*, as in other weak preterites, and thus they are predictable from the 1sg. alone. When a space is left blank within a paradigm below, it should be assumed that the relevant form is unattested. Since some of these verbs do not have attested infinitives, being used only as auxiliaries, it is fairly conventional to cite as the dictionary form the pres.ind.1&3sg., e.g. *wāt* rather than *witan*, for all preterite-present verbs.

(a) *Classes 1 and 2*

6.133 With vocalism in the present in LWS like a preterite of strong class 1 is *wāt* ‘know’; like a preterite of strong class 2 is *dēag* ‘avail’:

		Present Indicative	
Sg. 1	wāt		
2	wāst		
3	wāt	dēag, dēah	
Pl.	witon	dugon	
		Present Subjunctive	
Sg.	wite	duge, dyge ¹	
		Imperative	
Sg.	wite		
Pl.	witað		

Preterite Indicative		
Sg. 3	wiste, wisse	dohte
Pl.	wiston, wisson	dohton
Preterite Subjunctive		
Sg.	wiste, wisse	dohte
Infinitive	witan	dugan ²
Infl.inf.	to witanne	
Pres.part.	witende	dugende
Pa.part.	witen	

The verb *āh* ‘possess’ is usually classified as of the class 1 type, but it is better treated as being of the class 7 type, see §6.140.

¹ *Dyġe* occurs Bo 38.123.18, Lch I (Herb) 2.15.

² RevMon (Whitelock) 274. The editor has supplied *-an* in a damaged passage.

6.134 In regard to *wāt* (a): 2sg. *wāst* for expected **wās* < **wait-t(a)* is formed analogically by the re-addition of *-t*, but at an early date, cf. Got *wāist*.¹ We should expect the imperative singular to have been formed with PIE **-e*, which would have been lost in Gmc. Imperatives in OE *-e* are thus subjunctives in form; LiEpis 22 *ġewit* (beside Li *witte*), comparable to ON *vit*, is therefore to be regarded as more original than LWS *wite*. In the pret. of *wāt*, forms with *-st-* are more frequent than those with *-ss-* already in EWS, except in Bo, although *-ss-* is the older form, reflecting PGmc **-tt-*, see Prokosch (1939: §29a). *Wiste* was created analogically by the re-addition of a dental preterite suffix at a later date; such forms are found in all the WGmc languages. Pa.part. *witen* is formed by analogy to strong verbs; the expected **wiss* < **wit-taz* < PIE **wid-tos* has been re-lexicalized as a common adjective *ġewiss* ‘certain’. In the inflected infinitive, Ælfric has only *-enne*, whilst EWS has only *-anne* except CP 15.93.25 *to witenne* (2×). There also occur negated forms to *wāt* showing contraction, e.g. *nāt*, *nyton*, *nyste*, etc., see Hogg (1992b: §5.152). There are the expected phonological variants of *wāt*, e.g., with back umlaut (ibid.: §5.104(2)) Merc *weotun* pres.pl., *weotað* imper.pl., with combinative back umlaut (ibid.: §5.109(3)) Nbr *wuton*, *tō wuttanne*, etc. On spellings like EWS *wietan*, *wieton*, *ġewietene* in CP, see ibid.: §5.165.² In Nbr are also to be found forms bearing inflexions like those of strong presents, e.g. pl. *wutas*, *wutað*, *witteð*. In regard to *dēag* (b): The form *dēah* shows final devoicing of /ʎ/, see ibid.: §§7.59ff., and cf. Got *dāug*. Rare umlaut in the subj. *dyġe* shows that the subjunctive inflexion reflects PGmc pret. **-ī(b)* rather than pres. **-ai(b)*. The only attested Angl form of this verb is Li *dēg* pres.ind.3sg.

¹ See Bammesberger (1990b: 281–5), responding to the proposal of Sihler (1986) that **waist* could be the phonologically regular development of **wait-t(a)*.

² The frequency of such spellings, however, is striking and suggests an actual phonological basis. Brunner (1965: §22A3) argues for rounding after /w/ under low stress.

(b) *Class 3*

6.135 With vocalism in the present in LWS like preterites of strong class 3 are *an(n)* ‘grant’, *can(n)* ‘know (how)’, *þearf* ‘need’, *dear(r)* ‘dare’:

Present Indicative				
Sg. 1	ann	cann	þearf	dear
2		canst	þearft	dearst
3	ann	cann	þearf	dear
Pl.	unnon	cunnon	þurfon	durron
Present Subjunctive				
Sg.	unne	cunne	þurfe, þyrfe	durre, dyrre
Imperative				
Sg.	geunne			
Preterite Indicative				
Sg. 3	ūðe	cūðe	þorfte	dorste
Pl.	ūðon	cūðon	þorfton	dorston
Preterite Subjunctive				
Sg.	ūðe	cūðe	þorfte	dorste
Infinitive	unnan	cunnan	þurfan	
Infl.inf.		to cunnanne		
Pres.part.	unnende	cunnende	þearfende ¹	
Pa.part.	unnen	-cunnen		

No imperative forms are attested in the plural. *An(n)* and *can(n)* may be *on(n)* and *con(n)* in EWS and Angl. As with *wāt*, §6.134, Ru1 and Nbr have occasional by-forms with the endings of strong presents, e.g. Ru1 *cunnað*, *cunneþ* pres.pl., Li *ðorfæð* 3sg., *ðofeð* (sic) 3pl. As regards umlaut in pres.subj. *þyrfe*, *dyrre*, see the discussion of *dyge*, §6.134.

¹ Often substantivized, with an alternative substantive form LibSc 29.7 *beþurfendra*, MtGl (Ru) 5.3 *þurfende*. There also occurs a stem (*be*)þurfend- (4× in glosses) both as participle and substantive. As might be expected from what is said below, §6.136, the pres.part. may be *ðorfende* in Ru1 and Nbr. OE *þearfende* appears to be an innovation: cf. ON *þurfandi*, Got *þaurbands*. One would expect *þurfende* to be more original, since all other non-finite forms of pret.-pres. verbs have the stem of the pres.pl.

6.136 In regard to *ann* (a): beside imper.sg. *unne*, a subjunctive in origin, like *wite*, see §6.134, there is more original LWS *geunne*, beside DurRitGl

gionn (39×), *geonn* (1×), the Nbr forms showing substitution of the pres.sg. stem *-onn* (= LWS *ann*, Hogg 1992b: §5.5) for *-unn*. In Angl the verb is attested only in Li and DurRitGl.¹ In regard to *cann* (b):² pres.ind.2sg. *canst* cannot be any very old formation, as NSGmc **kanst* should have developed to OE **cōst*, see *ibid.*: §3.14. The original form must have been **kant*, see §6.142(b).³ The older pa.part. *cūð* is used as a common adjective meaning ‘known’. In regard to *þearf* (c):⁴ the Nbr stem is *ðorf-*, presumably influenced by the vocalism of the pret.; but cf. MtGl (Li) 26.65 *ðurfu* pres.pl. Ru1 likewise has *þorfende* beside the usual stem *þurf-*. There also occur in Nbr present forms with strong present inflexions, Ru2 (*bi*)*ðorfeð* (also pl.?), Li *ðorfæð*, pl. *beðorfeð* beside *ðurfu*. In regard to *dearr* (d): pres.ind.2sg. *dearst* does not have an analogical ending, like *canst*, but is an archaic form, since the stem originally alternated **dars-* ~ **durz-* under Verner’s Law; cf. Got *ga-dars*, *ga-daúrsum*, and see Bammesberger (1998b: 16). Hence also the *-s-* in the preterite. Li has 3sg. *darr*, as if subject to combinative breaking, see Hogg (1992b: §5.29), but more likely by analogy to Li, Ru2 *darste* pret., see *ibid.*: §5.34. Ru1 has only pret. *durste*, *dyrste*; the manuscript has *dyste* for the latter. The earlier form *dorstæ* appears on the Ruthwell Cross. The verb is not found in PsGl(A).

¹ On the etymology, see Bammesberger (1998b).

² On the derivation, see Eichman (1973).

³ It is notable, however, that all the WGmc languages have reflexes of **kanst*. Possibly the geminate in **kann-st* was not reduced early enough for the word to lose the nasal consonant in NSGmc; but this plainly did not prevent loss of /n/ in *cūð* < **kunn-þaz*, to the same root.

⁴ On the etymology, see Molencki (2002: 365).

(c) *Classes 4 and 5*

6.137 With vocalism in the present in LWS like preterites of strong class 4 are *geman* ‘remember’, *beneah*, *geneah* ‘suffice’, *sceal* ‘shall’; perhaps like a preterite of strong class 5 is *mæg* ‘can’:

Present Indicative				
Sg. 1	geman		sceal	mæg
2	gemanst		scealt	miht
3	geman	-neah	sceal	mæg
Pl.	gemunon	-nugon	sculon	magon
Present Subjunctive				
Sg.	gemune, gemyne	-nuge	scyle, scule	mæge
Imperative				
Sg.	gemun			
Pl.	gemunaþ			

		Preterite Indicative			
Sg. 1	ġemunde	-nohte	sćolde	mihte	
Pl.	ġemundon	-nohton	sćoldon	mihton	
		Preterite Subjunctive			
Sg.	ġemunde	sćolde	mihte		
Infinitive	ġemunan	sćulan	magan		
Infl.inf.	to ġemunanne				
Pres.part.	ġemunende		magende		
Pa.part.	ġemunen				

On umlaut in the subjunctives *ġemyne*, *sćyle*, see the discussion of *dyġe*, §6.134.

6.138 In regard to *ġeman* (a): the verb almost always bears a prefix *a-*, *ġe-*, *of-*, *on-*, but cf. Max I 141 *mon*, LawVIAs 8.1 *munon*. Pres.ind.2sg. *ġemanst* has an analogical ending, *-st* for earlier **-t*, see §6.142(b). The imperatives *ġemun*, *ġemunað* are still used by Ælfric, but they are not infrequently replaced by the subjunctives *ġemune*, *ġemunen* in non-Ælfrician LWS. Sometimes in LWS the verb is inflected as if not of the pret.-pres. class, e.g. ÆGram *iċ ġemune* (4×), ÆCHom and ÆELS *ġemanð* (2×), and cf. already in EWS Bo 36.106.27 *ġemunst*. In Angl the word is not inflected at all as a pret.-pres. verb but is conjugated in the pres. as a weak verb. The forms in PsGl(A) suggest inflexion as a verb of class III, since gemination is lacking, umlaut is sporadic in the present, and the preterite lacks umlaut or a vowel before the dental suffix, thus *ġemumu* pres.ind.1sg., *ġemyne* 2sg., *ġemynen* subj.pl., *ġemyne* imper.sg. *ġemunað* pl., *ġemundes* pret.ind.2sg. Nbr forms are similar, but almost always with *-y-* in the root, e.g. Li *ġemyne* pres.ind.3sg., *ġemyste* (from **ġemynste*, the latter probably by analogy to *dorste*) pret.3sg.,¹ but cf. *ġemona* imper.sg. (or inf.?), JnGl 18.20 *ġemynas* imper.pl., corrected by the scribe from *ġemonas*. In regard to *-neah* (b): the vowel quantity is shown by cognates to have been short, e.g. Got *ga-nah*, and thus the verb must be of the class 4 type rather than class 2. The plural stem *-nug-* does not end in a resonant, the way verb stems of class 4 usually do, but it may be explained on the same basis as *brocen*, see §6.60n1. As regards *sćeal* (c): WS has *sćeolon* beside *sćulon*, Nbr *sćylon*, *sćilon* beside *sćiolun*, see Hogg (1992b: §§5.65ff.). WS and Nbr also show palatal diphthongization in the pres., hence usual *sćeal*, for which *sćeall* is very common in LWS. The verb is lacking in PsGl(A), but Ru1 has once *sćalt* pres.ind.2sg., with failure of fronting before /l/ plus consonant, see Hogg (1992b: §5.15), whence *a* is extended to 3sg. *sćal* (1×), also at Lit. 5.5.1.4 (Thomp-Lind) 1 (a southern rubric in DurRit), if *a* is not instead analogical to the pret. Ru1 *sćalde* (once, alongside *sćuld-* 2×),

Nbr *scealde*, see *ibid.*: §5.34.² In regard to *mæg* (d): pres.ind.2sg. *miht* and pret.3sg. *mihte*, etc., are probably influenced by the noun *miht*, which shows umlaut, a change to be expected in the verb only in the pres. subj. (with pret.subj. inflexion, see §6.124). EWS has etymological *meaht*, *meahte*, but already also very frequent *mehhte*, with palatal monophthongization, see *ibid.*: §5.120. Angl has the pret. stem *mæht-*, also pres.ind.2sg. *mæht*, with smoothing, see *ibid.*: §5.93, whilst PsGl(A) *meġ* 3sg. shows second fronting, see *ibid.*: §§5.87ff. Late Kt has *meht* pres.ind.2sg., with palatal monophthongization, see *ibid.*: §5.119n1, and subj. *meiġe*, pres.part. *meġende*. Already in EWS there is some intermixture of *mæg-* and *mag-*, e.g. CP, Bo *mægon* pres.pl., ÆGram *magende*, a mixture found also in Angl. In LWS, but not in the best Ælfric manuscripts, there occurs not infrequently a pret. stem *mug-*, reflected often in ME, e.g. in all forms of the verb in the *Ormulum*. In a sense, *mæg* does not actually belong to the type of class 5, since PGmc **maz* must be assumed to have its **a* not from PIE **o* but from **a*, given the evidence of related forms like Grk *μηχος*, Doric *μᾶχος* ‘contrivance’, see Prokosch (1939: §65g). It ought then to have been of the class 6 type, but there is no evidence of alternation between **maz-* and **mōz-* in this verb. It must already in PGmc have been remodelled to resemble a verb of the class 5 type, which would have been natural enough after the development of PIE **H* to Gmc **a*: cf. Got *mag* pres.ind.1sg., *magum* pl., *mahta* pret.ind., etc.

¹ The assumption here is that the written form is correct and shows compensatory lengthening upon loss of /n/, see Hogg (1992b: §3.14). This requires the assumption that the form with *-st-* is as old as NSGmc, and that is certainly plausible: cf. OSax pret. *far-munste*, etc. Cf. §6.136&cn2, 142(b) on *canst*. The substitution of *-st-* for *-d-* in the preterite was probably motivated by the consideration that all other pret.-pres. verbs reflect a voiceless dental suffix in the pret.

² Rather, Brunner (1965: §423A1) suggests that *scealde* is analogical to the pres., or to *walde*.

(d) *Classes 6 and 7*

6.139 With vocalism in the present in LWS like a preterite of strong class 6 is *mōt* ‘be allowed, be obliged’; like a preterite of strong class 7 in regard to vocalism is *āh* ‘possess’:

Present Indicative		
Sg. 1	<i>mōt</i>	<i>āh</i>
2	<i>mōst</i>	<i>āhst</i>
3	<i>mōt</i>	<i>āh</i>
Pl.	<i>mōton</i>	<i>āgon</i>
Present Subjunctive		
Sg.	<i>mōte</i>	<i>āge</i>

	Imperative	
Sg.	āge	
	Preterite Indicative	
Sg. 1	mōste	āhte
Pl.	mōston	āhton
	Preterite Subjunctive	
Sg.	mōste	āhte
Infinitive	āgan	
Infl.inf.	to āgenne	
Pres.part.	-āgende	

No imperative plural or past participle is attested to either verb.

6.140 In regard to *mōt* (a): pres.ind.2sg. *mōst* and pret. *mōste* are formed like *wāst*, *wiste*, see §6.134. Very few Angl forms are attested: Ru1 has *mōt*, *mōstun*; Li has *mōt*, *mōto we*, *mōston*. In regard to *āh* (b), *h* is due not to final devoicing but to the non-application of Verner's Law.¹ LWS pres.ind.2sg. *āhst* is formed by analogy to strong and weak presents in *-st*; the older form is Li *āht* (3×), see §6.142(b). A participial form *āgen*, *āgen* (see §6.29 on the umlaut in the latter) survives in adjectival function with the meaning '(one's) own'. There also occurs a negated form *nāh*, *nāgon*, *nāhte*, with a dialect distribution like that of *nāt*, see §6.134. This verb is usually classified as being of the class 1 type, on the assumption that the PGmc vocalism **-ai-* of the present (originally preterite) singular replaced **-i-* of the plural at an early date. If that were the case, this would be the only preterite-present verb that does not preserve the original distinction between singular and plural vocalism in verbs in which such a distinction is to be expected (i.e., outside of class 6), and the change would have to have taken place at a very early date, since the verb in all the Gmc languages reflects **-ai-* throughout rather than **-i-*. This is rather suspect, and it thus seems likelier that **-ai-* is reflected in both singular and plural because this verb originally had a root structure comparable to PGmc **xaitanan* > OE *hātan*.²

¹ Cf. Got pres.ind.1&3sg. *āib* (7×) beside analogical *āig* (1×). These figures are suggestive rather than probative, since there is devoicing of final fricatives in Got. But ON *á* is unequivocal, since original, final **-aih* develops to *á*, as here, whilst **-aih* from earlier **-aiǝ* gives ON *-é*, as in *sté*, older pret. of *stíga* 'step'.

² To the objection of Birkmann (1987) to classifying *āh* this way, cf. Antonsen (1992: 97).

2 Historical development

6.141 The antiquity of the preterite-present category is demonstrated not just by its appearance in all the Germanic languages and by extra-Germanic

cognates like those of *wāt*, see §6.131, but by the nature of the dental suffix in the preterite. It does not reflect the PGmc *-ð- that is found in the weak verbs but *-þ- < PIE *-t-, suggesting that the preterites to this class were formed before the rise of weak preterites in *-ð- in PGmc, as otherwise it would be surprising that *-ð- was not used to form the preterites to these, as well.¹ The origin of this *-þ- is disputed, see §6.79&n4, but it must be regarded as ancient. Another difference between preterites in this class and in normal weak verbs is that in the latter the dental suffix originally appeared after a stem-final vowel, whilst in the pret.-pres. verbs it is attached directly to a root-final consonant.

¹ The assumption of *-þ- rather than *-ð- is necessary to explain, for example, *āhte*, *mihte* rather than **āgde*, **mægde*, see §6.100n3, and *cūð* 'known' rather than **cund*, see Hogg (1992b: §3.14). The prets. of *ġeman* and *sċeal* are exceptions, with *-ð- already in PGmc: cf. Got *munda*, *skulda*, ON *munda*, *skylda*.

6.142 Some other signs of antiquity in this class of verbs are worthy of note. (a) In pret.-pres. verbs the vocalism of the stem of the 2sg. is the same as that of the 1&3sg., whilst in strong verbs the 2sg. of the pret. has the stem of the plural in WGmc. The mixture of stems in the pret. singular of strong verbs is a WGmc innovation, see §6.21, and so the pret.-pres. verbs demonstrate a more archaic state of affairs. (b) It is also notable that whilst strong verbs have in the pret.2sg. the ending *-e* that probably reflects an aorist inflexion, and weak verbs have the ending *-es(t)* proper to the present, pret.-pres. verbs retain the original perfect ending, reflecting PIE **-tha*, which developed to Gmc *-t* after fricatives.¹ All the WGmc languages show forms in which *-st* has been substituted or has developed by analogical processes, as with OE *āhst*, *canst*, *dearst*, etc., but all also preserve some forms in *-t* like OE *þearft*, *sċealt*, *miht*. North and East Gmc retain original *-t* with very little analogical disruption. (c) It is striking that pret.-pres. verbs with the vocalism of class 4 have stems with *u* in the plural (*ġemunon*, *ġenugon*, *sċulon*) rather than the *æ* that is found in the pret.pl. of strong verbs of class 4. The latter probably originates in aorist forms, see §6.34, and thus these verbs are best assumed to evince the vocalism of the original perfects from which most strong verb preterites derive, before the mixing of perfect and aorist forms began in PGmc. Likewise, as noted above, §6.138, although *mæg* is in origin probably like verbs of strong class 6 rather than 5, it must have been re-formed quite early, since it shows no trace of class 6 characteristics in Germanic. It also shares some of the archaic features mentioned above in connexion with pres.ind.2sg. *miht* and pret. *mihte*, showing that re-formation of the verb must have been quite early. If that is the case, it is of some interest that the pres.pl. is not **mægon* but *magon*, making it parallel to *ġemunon*, etc., as regards original perfect vocalism. (d) On the archaic nature of the subjunctive forms in this class of verbs, see Euler (1994).

¹ The inflexion *-t* thus predominated in the pres.ind.2sg. in this class, and *-t* was accordingly extended to environments in which *-þ* should have appeared, in Got *kant*, *skalt* and ON *annt*, *mant*. Original *-þ*, however, is reflected in Angl (*e)arð* ‘you (sg.) are’, see §6.150(i)&n1.

6.143 It will have been noted that wherever a past participle to one of these verbs is preserved in participial function in OE, it has the form of a strong participle with suffix *-en*, thus *witen*, *unnen*, *gemunen*. Yet there are also certain OE adjectives that plainly reflect old weak participles with dental suffix, thus *gewiss* ‘certain’, *cūð* ‘known’. The restriction to adjectival function of the latter (as demonstrated chiefly by the semantic restriction of the weak form) suggests that the strong forms are innovations, and that is, in the main, what the comparative evidence suggests. In North and East Gmc we find only weak participles, e.g. Got *kunþs*, *munds*, *mahts*, along with some weak participles re-lexicalized as adjectives, e.g. Got *þaúrfts* ‘useful’, ON *skyldr* ‘necessary’, with the sole exception of Got *áigans* ‘possessed’ (cf. *áigin* ‘property’), agreeing with OE *āgen*, *āġen*, OFris *ēgen*, OSax *ēgan*, OHG *eigan*. Since the suffixes **-n-* and **-t-* were both used to form verbal adjectives in PIE, it may be best to assume that the alternative use of the two suffixes, as suggested by Got *áigans*, is another archaism reflected in the pret.-pres. verbs of Gmc.

6.144 Amongst the 100 commonest verbs encountered in the MCOE, see §6.5, nearly all the pret.-pres. verbs are to be found: *mæg* ‘can’, *sceal* ‘shall, ought’, *wāt* ‘know’, *āh* ‘possess’, *þearf* ‘need’, *mōt* ‘be allowed’, *ġeman* ‘remember’, *cann* ‘know how’. Excluded are only *dēag* ‘avail’, *ann* ‘grant’, *dearr* ‘dare’, *be-*, *ġe-neah* ‘suffice’.

V Athematic verbs

6.145 In PIE, certain verbs might be conjugated in the present and aorist in such a way that the inflexions were added directly to the root, without any intervening thematic vowel, see §6.4. Thus, for example, whilst athematic Lat *est* ‘is’ reflects PIE **Hes-ti*, thematic Lat *tegit* ‘covers’ reflects **teg-e-ti*. The inflexions are identical in the two types, except that whilst the thematic type has PIE **-ō* in the pres.ind.1sg., the athematic type has PIE **-mi*. For this reason the relevant verbs in OE are sometimes referred to as *mi*-verbs, by analogy to references to *μi*-verbs in Greek, even though no reflex of **-mi* is to be found in most of these verbs in WS. The number of surviving Gmc verbs that evince characteristics of conjugation in this manner is small but of exceptionally high frequency, as might be expected in connexion with the preservation of some particularly anomalous inflectional patterns. They are all amongst the 100 commonest verbs in the MCOE.

The relevant verbs in OE are *bēon*, *wesan* ‘be’ (with the independent root reflected in *is* ‘is’ and related forms), *dōn* ‘put, do’, *gān* ‘go’ and *willan* ‘will’. Other WGmc languages retain traces of another such verb, OSax *stān* (beside *standan*), OHG *stān*, *stēn* (beside *stantan*) ‘stand’, comparable to Grk ἵστημι < *s(t)i-stā-mi.

1 The verb *bēon*, *wesan*

6.146 The athematic verb with the most complicated history is ‘to be’, and preservation of its irregularities is unsurprising given that it is the commonest verb in OE. In LWS the verb is most commonly inflected as follows:

Present	Indicative	Subjunctive	Imperative
Sg. 1	eom	sȳ, bēo	
2	eart	sȳ, bēo	bēo, wes
3	is	sȳ, bēo	
Pl.	sint, sindon	sȳn, bēon	bēoð, wesað
Consuetudinal and future			
Sg. 1	bēo		
2	bist		
3	bið		
Pl.	bēoð		
Preterite			
Sg. 1	wæs	wāere	
2	wāere	wāere	
3	wæs	wāere	
Pl.	wāeron	wāeren	
Infinitive	bēon, wesan		
Infl.inf.	to bēonne		
Pres.part.	bēonde, ¹ wesende		
Pa.part.	gebēon ²		

This is the only verb in OE with discrete synthetic future forms. Probably four PIE roots contribute to the WS paradigm of ‘to be’. (i) **Hes-* is reflected in forms that begin with a vowel or *s-* (the latter reflecting the zero-grade **Hs-*). This is the root reflected in so many familiar cognates, such as Lat *sum*, Grk εἰμί, Sanskrit *ásmi* ‘I am’. (ii) The second root is **bhew(H)-*, reflected in Lat *fuī* ‘I have been’, Grk φῶω ‘I beget’, Sanskrit *bhávati* ‘becomes’. (iii) The third root is **wes-*, as in Sanskrit *vásati* ‘dwells’, Middle Irish *fōaid* ‘spends the night’.³ The last of these supplies all pret. forms, as well as inf. *wesan* and pres.part. *wesende*. It has the form of a strong verb

of class 5, with alternation between *-s-* and *-r-* under Verner's Law, see Hogg (1992b: §§4.4–5) and §6.61. (iv) Most likely *earth* reflects an *o*-grade form of the root **er-*, as explained in §6.150. For details of the sometimes complicated (and contested) derivation of the OE forms from their PIE antecedents, see Prokosch (1939: §75a).

¹ Only CIGl 1 2268 *bēondum*.

² Only ChronE 1096.4.

³ On the suppletive relationship and semantic development, see Tanaka (2002). Shields (2004) maintains instead that PGmc **wes-* is unrelated to PIE **wes-* but represents the same stem **Hes-* as in the present, with a deictic particle employed as a prefix **u-* in the preterite.

6.147 In PIE the root **Hes-* formed an athematic present (and hence also imperfect) but no perfect or aorist, and that is why suppletion was required in the Gmc preterite, which in other classes derives from the perfect and aorist. Originally, *wesan* must have had present-tense forms in Germanic, but they dropped out of use because when the preterite forms came to serve for the preterite of the reflex of PIE **Hes-*, the meaning of the verb was altered accordingly, and present forms in the sense 'to be' were not required, as they duplicated the function of **Hes-*. On the other hand, the reflexes of **bhew(H)-* overlapped in function only partly with those of **Hes-*. OE *bið* remains semantically distinct from *is* in referring to future and habitual conditions, and so the two roots preserve full paradigms in the present indicative in all dialects of OE. The distinction in meaning between **Hes-* and **bhew(H)-* is harder to discern in the imperative and in non-finite forms, in which the sense of contingency or consuetude is to an extent inherent, and thus it is not surprising that the reflexes of **bhew(H)-* have entirely supplanted those of **Hes-* in these categories; cf. Lat *es-se*, Grk *εἶναι* 'to be', etc. Likewise the distinction in meaning is somewhat obscured in the subjunctive, to which contingency is innate, and so it is no wonder that subjunctive forms of the reflex of **Hes-*, an ancient category (cf. Lat. *sim*, etc.), have almost completely driven out subjunctives to **bhew(H)-* in the Angl dialects, see §6.149.

6.148 Two of the stems contributing to the paradigm of 'be' produce examples of unresolved hiatus. (i) The spelling <ie> (at least outside EWS)¹ in the subjunctive does not represent a diphthong but a disyllabic sequence, as may be determined by the etymology and by poetic metre. The subjunctive, showing zero grade of the root, derives from the PIE optative, as usual, which had in PGmc **s-(i)j-* in the sg., e.g. **s(i)jæm* 1sg., and **sī-* in the pl., e.g. **sī-mæ* 1pl. In WGmc the latter stem was generalized, and in Pre-OE normal subjunctive inflexions were added. In a form like 3sg. **sī-ai* the vowel would have been shortened before another vowel.² It cannot be

proved by direct means that disyllabic *sie* had a short root vowel, but the word must often be metrically decontracted in poetry, and in no instance is a heavy initial syllable required by the metre.³ The word appears with sufficient frequency in verse, about 90 times, that the non-occurrence of a form requiring a heavy initial syllable cannot plausibly be attributed to chance. The spelling *sie(n)* also occurs in LWS prose, but only in texts that display Angl features, where it and the pronoun *hie* are very commonly the only words in the text containing <ie>.⁴ (ii) The forms *bēon* and *bēoð* are sometimes unresolved in the scansion of verse, where the metre requires a heavy initial syllable, e.g. Dan 557b *drēamleas bēon*, ChristA 795a *þær moniġ bēoð*. The verb is to be compared with Lat *fīō* ‘I shall be’ and Old Irish *biu* ‘I am accustomed to being’ and hence derived from **bhw-iy-ō* 1sg. Accordingly, Gmc **bij-anþ* pres.3pl. may be expected to have developed in Pre-OE in a manner comparable to *frēoð* pres.3sg. ‘loves’, see §6.119. Since *frēoð* may be disyllabic in verse, as at GenA 2260, as may the similarly formed *fēoð* ‘hates’, as at GenA 911, hiatus in *bēon*, *bēoð* need not be regarded as analogical in origin. There is no hiatus in pres.2&3sg. *bist*, *bið* because **bhw-iy-esi*, **bhw-iy-eti* developed to PGmc **bijis*, **bijijþ*, in which **j/* would have been lost in WGmc, with early resolution of the hiatus, see Hogg (1992b: §4.7).

¹ Perhaps in EWS as well: cf. the disyllabic scansion of *sie* in Met 10.23, 13.35, though Mercianisms in Met are not unthinkable: cf. §6.12. On <ie> of disyllabic origin in WS, see Hogg (1992b: §5.147).

² Cf. §5.17n3 on the parallel to the pronoun *hie*. On the shortening of antevocalic long vowels, see Fulk (1994). This corrects Fulk (1992: §115, in a chapter in which there is unfortunately no discussion of *bēon*), since *sie* is to be derived from **sī-*, not **sij-*, see Prokosch (1939: §75a), Krahe and Meid (1969: II, §97).

³ See §5.17n3, Fulk (1992: §108).

⁴ See Fulk (forthcoming).

6.149 Some of the alternative forms in the paradigm in §6.146 are distributed on a dialectal basis. No imperative forms are recorded in EWS, but *wes*, *wesað* are not Ælfrician, and the Angl equivalents *wæslwes*, *wosað* occur only in Nbr, where, conversely, imperatives *bēo*, *bēoð* never appear. Ps(A) has *bīo*, *bīoð*, Ru1 *bēo*, *bēoþ*, *bīoþ* (8×), beside *wæs* (2×), *wesaþ* (1×).¹ No infinitive is found in EWS, but *wesan* is rare in Ælfric (3×). Ru1 has *bēon* (18×, *wesa* 1×), the usual form also in LWS. The inf. is unattested in PsGl(A) (only *wesan* in the non-Merc portion of the gloss on the Canticles) but the OE Bede has *weosan* (6×). Nbr similarly has usual *wosa* and inflected infinitive *to wos(s)anne*, but cf. MtGl (Li) 1.20 *bīan*. An early Merc attestation of the stem *wes-* is CorpGl 2 9.101 *aetweosendre*, with diphthong by analogy to forms with back umlaut.² As for the subjunctive, the earlier form of LWS *sȳ(n)* is *sie(n)*, and this is the commonest form in all dialects but Ælfrician LWS, in which instead *bēo(n)* predominates. But *bēo(n)*,

bīo(n) is also to be found in EWS, in Ru1 (11×, beside usual *sie(n)*) and similar forms, *pace* Campbell, 1977: 768(d), and twice in Li (*bīa*, *bīe*).

¹ This corrects Campbell (1977: §768(d)).

² Although the form is difficult, undoubtedly inf. *wesan* may also be abstracted from CorpGl 2 5.551 *wesandraegtre*, glossing Lat *exerceri*.

6.150 In addition to predictable phonological variants (e.g. Merc, Kt *siondan*, *seondan*, see Hogg (1992b: §5.104); Angl *wērun*, *wōēron* pret.pl., see *ibid.*: §§3.25, 5.177; PsGl(A) *wes* pret.1&3sg., see *ibid.*: §§5.87ff.; Li *bīan*, see *ibid.*: §5.138) and morphological variants (e.g. *bēo wē*, see §6.7), some discrete non-WS forms occur. (i) Corresponding to WS *ear* are Merc *earð*, Nbr *arð*, for which the best explanation is that they reflect the suppletive stem PIE **er-* (reflected in Lat *orior* ‘I arise’, Grk *ὄρνυμι* ‘I arouse’) in the form of a pret.-pres. verb of the class 4 type, hence with PIE **or-* in the pres., with the original PIE perfect inflexion **-tha* of the 2 sg., see §6.142&n1.¹ Merc *earð* thus shows breaking (of **æ* in **ærþ* < PGmc *arþ*), whilst Nbr *arð*, rather than showing extraordinary combinative breaking, see *ibid.*: §5.29, has its vowel by analogy to pl. *aron*, *arun*, to which corresponds Merc *earun*, the expected plurals to the pret.pres. verb reflected in *earð*, which plural forms occur beside *sint* (PsGl(A) *sind*) and *sindon*, *sindun*. The pres.ind.1sg. is more difficult to explain: Nbr *am* may be regarded as taking its vocalism from pl. *arun*, and Merc *eam* from *earð* and *earun*, but this will not explain Kt *eam*,² and WS *eom* is simply mysterious.³ In the plural, *sindon* beside *sint*, *sind* is the result of treatment as a pret.-pres. verb;⁴ cf. Sanskrit *sānti* < **sēnti*.⁵ On the final devoicing in *sint*, see *ibid.*: §7.65. There also occurs subj. PsGl(A) 26.6 *siem* (also *sion*), which is certainly analogical, see *ibid.*: §5.146. Bülbring (1902: §454) explains Nbr *sē*, see pres.sg.subj. as the development of *sie* in unstressed position, with subsequent re-lengthening, see Hogg (1992b: §§2.44, 5.198); but Kt *sē* is perhaps due instead to Kt replacement of LWS *y* by *ē*, cf. *ibid.*: §5.194, as suggested by Brunner (1965: §427A3). (ii) As for the stem in *b-*, Angl has pres.ind.1sg. *bīom*, *bēom*, *bīum*, *bēam* beside one instance of *bīo* (PsGl(A)), if this is not a subjunctive. The ending *-m* is probably not analogical to *eom*, *eam*, *am* but original: cf. OFris *bim*, *bem*, OSax *bium*, OHG *bim*.⁶ In Nbr, beside rare *bīað*, the pres.ind.pl. to the stem in *b-* is *biðon*, *bioðon* (the latter with back umlaut) and similar forms, as if to a pret.-pres. verb; such forms are a small minority in Ru1.⁷ In all the Angl dialects there is occasional mixture of pres.ind.3sg. and 3pl. forms, hence sg. Ru1 *bēoþ*, Ru2 *bīað*, pl. PsGl(A), Li *bið(ð)*. Disyllabic MkGl (Li) 10.43 *bīeð* ind.3sg. shows analogical addition of the unsyncopated inflexion found in most verbs of other classes. (iii) As for the stem in *wes-*, there are some unusual present forms, Phoen 373 *weseð* 3sg., LS 20 (AssumptMor) 270 *wesaþ*

(one of the Blickling Homilies) pl., and relatively frequent *wese* subj.sg., often as an imperative, in poetry, PsGl(E, I) and LS 20 (AssumptMor). On frequent *was*, with unfronted *a*, see Hogg (1992b: §6.4.1).

¹ This would then be the only verb in Germanic in which **-tha* is reflected as *-þ* rather than as the alternant *-t* that appeared after fricatives. Such is the explanation of Prokosch (1939: §75a). Lühr (1984: 37), however, argues that the *-ð* in Angl (*e)arð* originated in a following pronoun *þū*. This analysis demands the assumption that (*e)ar-* does not arise from a preterite-present stem derived from PIE **or-* but in the plural **erub* < **izuðe* from PIE **es-*. How **er-* was then altered to **ar-* in WGmc, however, cannot be explained without the assumption of some analogical changes that do not seem well motivated.

² Kt *eam* is probably not a Mercianism (as *earan* in Ch 1500 (Rob 3) and ChHead 1436 (Birch 384) may be), as it is found twice in lKt (OccGl 49).

³ The PIE form was **és-mi*; cf. Got *im*. Prokosch says that *eom* ‘has its vowel from the synonymous WS *bīo*’ (1939: §75a), and Brunner (1965: §427) goes so far as to wonder whether the actual form was not *ēom*, with a long diphthong. Neither idea is very persuasive. The high frequency of the verb and use in positions of low stress may have led to an unparalleled phonological development.

⁴ Shields (1984) argues instead that **-on* is an archaic PIE pres.3pl. ending, which seems problematic.

⁵ As Prokosch (1939: §75a) notes, OE *sind* would appear instead to reflect PIE **sentí*, with shifted accent, since it shows the effect of voicing under Verner’s Law. More likely the voicing under Verner’s Law originates in positions in which the word was in low stress, as suggested by Brugmann (1894: 552–3) and Bennett (1972: 109).

⁶ Wright and Wright (1925: §548) suggest that *bēom* is analogical to *eam*, but this is improbable, since the latter is not analysable as two morphemes: see §6.40&n1.

⁷ On *bi(o)ðon* as analogical to *syndon*, with *-on* added to 3sg. *bið*, see Hogg (2003: 74–8).

6.151 In all dialects there are synthetic negated forms of stems in an initial vowel or *w-*. In LWS the forms are these:

Present	Indicative	Subjunctive
Sg. 1	neom	
2	neart	
3	nis	
Preterite		
Sg. 1	næs	nǣre
2	nǣre	nǣre
3	næs	nǣre
Pl.	nǣron	nǣren

Anglian has the expected corresponding forms, *neam*, *narð*, etc., and adds pres.pl. *naro(n)*. The dialect distribution of contracted and uncontracted forms is like that for *nabban*, see §6.118.

2 *The verb dōn*

6.152 In WS the verb *dōn* ‘put, do’ is normally inflected as follows, with such variations in the inflexions as are encountered in other verbs, see Hogg (1992b: §§3.11–30):

Present	Indicative	Subjunctive	Imperative
Sg. 1	dō	dō	
2	dēst	dō	dō
3	dēð	dō	
Pl.	dōð	dōn	dōð
Preterite			
Sg. 1	dyde	dyde	
2	dydest	dyde	
3	dyde	dyde	
Pl.	dydon	dyden	
Infinitive	dōn		
Infl.inf.	to dōnne		
Pres.part.	dōnde		
Pa.part.	gedōn		

In the pres.1&2pl. the form is usually *dō* before a pronoun, see §6.7. The word has been lost from East and North Gmc, but cf. the Gothic weak desinences pret.ind.3sg. *-da*, pl. *-dēdun*, etc., suggesting an original ablaut alternation between sg. and pl. It is cognate with Lat. *fa-ciō* ‘I do’ (perf. *fē-ci*), Grk *τί-θη-μι* ‘I put’, which illustrate the point that the WGmc verb reflects the PIE *ō*-grade of the root, whilst in other IE languages the grade is usually *ē*.¹

¹ Bammesberger (1986b: 112) explains this by assuming that **ō* was the vocalism of the reduplicated perfect stem and that, after loss of the reduplicative syllable, **ō* was extended to the present by analogy to pret. **he-hait* : pres. **haitan*.

6.153 The present system reflects the PGmc formation fairly straightforwardly, with loss of hiatus in all forms, preceded by umlaut in *dēst*, *dēð*. But since this word reflects an athematic verb, umlaut in the 2&3sg. indicates that the thematic inflexions **-is*, **-iþ* were introduced analogically from strong verbs. The preterite, however, presents some difficulties. Most have preferred to explain it as a refashioning of a reduplicated PIE injunctive form, e.g. PIE **dhedhēt* 3sg., retaining the reduplicative syllable, with umlaut due to extension of the plural subjunctive marker **-ī-* (as in the subjunctive of ‘be’, §6.148) to the indicative, and with **u* in the root (before umlaut) either as an unusual reflex of PIE **H* or by analogy to preterite-present

subjunctives like *dyġe*, *scyle*.¹ We believe the following explanation is more plausible.² Just as with *sie(n)*, see §6.148, the non-preterite forms of *dōn* are frequently to be scanned as disyllables in verse, but never with a heavy initial syllable, e.g. Beo 1057, 1129 *swā hē nū ġit dēð*, Rid 41.7 *þæs þā bearn dōð*, but never ***dōn mihte*, though *ġedōn mihte* is a common type. It is therefore to be assumed that in WGmc **dō-an* there was antevocalic shortening of the long vowel, as in *sie(n)*, so that the form was **do-an* before the hiatus was resolved. At this time **[o]* was still an allophone of **/u/*, see Hogg (1992b: §§3.2, 3.10), and the variation is reflected in forms like OSax *duan*, *duon* beside *doan*, *doen* and OFris *dwā(n)*, and especially OHG forms like *duis(t)*, *duit* in Otfrid, with metrically short *ǔ*.³ Accordingly, in Pre-OE a new preterite was formed, taking the pres. stem **du-* and adding the endings of preterites of weak class I, hence, e.g., 3sg. **du-i-dē*. With loss of hiatus after umlaut, there resulted a short root vowel in the preterite, just as **-u-i-* results in a short vowel in *dryas* ‘wizards’, as proved by the poetic metre at Jul 301. In spite of this refashioning with a weak preterite, the origin of *dōn* as a strong verb is still marked by the form of the pa.part. *ġedōn*.

¹ See, e.g., Prokosch (1939: §75b). Against the supposition that PIE **H* could be reflected as Gmc *u* even in an unstressed syllable, see Fulk (1988). The alternative explanation proposed by Hill (2004: 280–1) that reduplicative syllables were unstressed in NWGmc, and *y* in OE *dyde* is the unstressed development of **e*, is phonologically insupportable.

² For details, see Fulk (1993).

³ For parallels to *y* as the umlaut of **ou*, cf. *wyrċan* ‘create’, *byċgan* ‘buy’ beside prets. *worhte*, *bohte*, etc., †*Wyr̥tġeorn* beside Latinized *Vortigernus*.

6.154 The verb is inflected in Kt as in WS, but cf. OccGl 49 8.22 *dede*, on which see Hogg (1992b: §5.194). In EWS there occur CP(C) 8.2 †*doe* pres.subj. and CP(H) 13.3 *weldoendum*, in which possibly *o* should be regarded as long, due to contraction, with analogical re-addition of the endings. But it is more likely that these are the original, uncontracted forms, because if they were analogical it would be surprising that they have disappeared entirely from LWS. Moreover, we do not find spellings like <foan> for *fōn* ‘take’ in EWS, and so non-contraction seems more likely than analogical re-formation. In addition, spellings of this verb with <oo> are so common in CP that perhaps some forms like *doon* and *dooð* represent uncontracted forms (although there are also spellings like *underfoon* in EWS, with <oo> representing a long vowel). In Angl there are many more uncontracted spellings, in all texts, e.g. PsGl(A) *doan*, *does(t)*, *doen* beside *dōn*, *dēs*, *dōn*, and in regard to these it is more difficult to determine whether the forms are original or analogical, see firstly *ibid.*: §5.147. Even in the pres.ind.2&3sg., where <oe> could represent an umlauted vowel

rather than a contracted one, the metre of poetry that is surely Angl in origin sometimes requires an uncontracted form, e.g. Beo 1057, 1129, 2855, see Sievers (1885: 477); and parallel spellings of the verb *gān* ‘go’ provide unambiguous evidence for both contracted and uncontracted forms, see §6.157. Uncontracted forms of *dōn* (or *gān*) in verse, however, never require a heavy initial syllable, though probably a heavy syllable should be expected if non-contraction were due to late analogy.

6.155 Angl texts also evince some forms that are morphologically distinct from the WS ones. (i) PsGl(A), Ru1, Ru2, Li and DurRitGl all have pres.ind.1sg. *dōm*, probably reflecting the origins of the verb in the PIE athematic class: cf. OSax *dōm*, OHG *tōm*.¹ (ii) There occurs in poetry an unusual pa.part., ChristC 1206 *for-dēn*, 1265 *ge-dēnra*;² also Lk(WSCp) 8.56 *gedēn*. The vowel *ē* must be the umlaut of *ō*, see §6.29, rather than a reflection of the *ē*-grade of this root found in most IE languages (as well as OE *dæd* ‘deed’), and which appears to underlie OHG *gitān*, OSax *gidān* (beside *gidōn*), since we should expect PGmc **dēnaz* to have produced OE *dōn* rather than *dēn*, see Hogg (1992b: §3.22). (iii) In Li, Ru2 and the Merc-derived PsGl(I), Mart 5, Bede, and some others, beside *dyde* there are preterite forms with <e> in the root. They occur only in the plural, where they are in the minority, beside more usual *dydon*. That this is at least sometimes a short vowel, as in OSax *deda*, OHG *teta* pret.ind.1&3sg. (beside 2sg. *dādi*, *tāti*, 3pl. *dādun*, *tātun*) is perhaps demonstrated by the back mutation in Kt Rec 6.5 *deodan*, as maintained by Campbell (1977: §768(b)), though the evidence is hardly secure.³ Campbell’s converse claim that there is no evidence for length in Nbr <dedun>, however, is plainly insupportable. His assumption is that when WS scribes copied Angl poetry, they substituted *dædon* for Angl <dedun> in ignorance of the actual quantity of the root vowel. This assumption requires him to propose that the poet of PPs extended this purely orthographic error into the realm of phonology, since the metre demands a heavy initial syllable in both instances of *dædun* in PPs, even though this text evinces numerous Angl features⁴ and must have been composed by an Anglian poet, who should have known better if Angl <dedun> always represented a word with a light initial syllable. More important, this analysis relies solely on orthographic testimony, ignoring those instances in poetry in which *dydon* is shown by the metre to have been substituted by WS scribes for Angl *dēdun*, e.g. Beo 1828b *hwīlum dydon*.⁵ It is thus possible that Angl <e> in the pret. always represents a long vowel, as might be expected given that <e> never appears in the Nbr pret.ind.1&3sg., the only ind. forms in which short /e/ appears in OSax and OHG.⁶ The Mercian-derived texts are less exacting in the observance of this distinction.⁷ Since the verb was abandoned in East and North Germanic, the origin of the long vowel in the pret. is difficult to determine.⁸

¹ With *-m* < PIE ind. **-mi*, see Flasdieck (1937a: 44). At all events, *dōm* must not be regarded as a late product of analogy to *eam*, *am* ‘I am’, which can only have been regarded as a single morpheme; see §6.40&n1.

² Flasdieck (1937a: 49) would explain *dēn* as an erroneous WS substitution for a form containing Angl <oe> in the scribe’s exemplar, under the misapprehension that <oe> represents an unlauded vowel rather than a decontracted form. This is possible, but another unusual pa.part. in this text, *bifēn*, with metrically monosyllabic *-fēn*, see §6.73, suggests that *dēn* may not be an error.

³ This is the Codex Aureus inscription. We of course have no secure evidence for original /e/ in the Kt pret., since *y > e*, see §6.154. It is not inconceivable that <eo> should represent the Kt back umlaut of *y*, since the latter is not often found in a position in which it would be subject to back umlaut. Moreover, if back umlaut remained an active phonological process in Kt, it might have applied after the change of *dydan* to *dedan*. Brunner (1965: §429A1) also objects that the misspelling <beoc> for *bōēc* undermines the authority of the orthography of this text. In addition, he regards the language of this text as Merc, but see Hogg (1992b: §1.9n1) and Lowe (2001: 82). Restriction of the forms in <e> to the plural is especially difficult to reconcile with Campbell’s point of view, since <e> is proper to the 1&3sg. in OSax and OHG.

⁴ See Fulk (1992: 410–14).

⁵ See Sievers (1885: 498), Fulk (1992: §355(4)).

⁶ The forms with <e> (including compound *ðerb-*) are these: Li ind.2pl. (2×, including one instance in MtMarg), ind.3pl. (7×), subj.3pl. (3×); Ru2 ind.3pl. (2×), subj.3pl. (1×).

⁷ Excluding subj. forms: PsGl(I) (Lindelöf) 3sg. (1×), 1pl. (1×), 3pl. (1×); Mart 5 (Kotzor) 1sg. (1×), 3pl. (1×); Bede 3sg. (1×), 2pl. (1×), 3pl. (1×). But <e> is to be expected in all forms of the subj., as in OHG. Hence it is not surprising that <e> has invaded the 1&3sg. in these texts, since it appeared in all other pret. forms; it is more surprising that it has not done so in Nbr. Forms with <e> (including subjunctives) are to be found as well in PsGl(E), MonCa 1 (Korhammer), ConfGl (Först), HomU 15 (Robinson), HomU 35.2 (Nap 44), and perhaps some others; but the last two texts show distinct Kt features. There also occur HyGl 2 (Milfull) 20.4 *dēdon*, which could be Kt., and Can (Brussels) subj.3sg. *dēde*.

⁸ The alternation of the root vowel in the OSax and OHG pret. is that of a strong verb. Prokosch (1939: §75b), followed by many, explains it as induced by analogy to class 5, though that is difficult to credit, especially as the WGmc present stem *do-* would then have differed from pret. **ded-/dēd-* in ways unparalleled in other strong verbs. Since the OHG pa.part. is *gītān*, as noted above, it may be that the long vowel in the pret. is original, with weak endings added, as in OE *dydon*. See Flasdieck (1937a: 50–4). This is also the conclusion of Hill (2004), though his explanation of the present vocalism as derived from the subjunctive of a root-aorist is difficult to credit.

3 The verb *gān*

6.156 In WS the verb *gān* ‘go’ is normally inflected as follows, with such variations in the inflexions as are encountered in other verbs, see Hogg (1992b: §§3.11–30):

Present	Indicative	Subjunctive	Imperative
Sg. 1	<i>gā</i>	<i>gā</i>	
2	<i>gāest</i>	<i>gā</i>	<i>gā</i>
3	<i>gāð</i>	<i>gā</i>	
Pl.	<i>gāð</i>	<i>gān</i>	<i>gāð</i>

Preterite		
Sg. 1	ēode	ēode
2	ēodest	ēode
3	ēode	ēode
Pl.	ēodon	ēoden
Infinitive gān		
Infl.inf.	to gānne	
Pres.part.	gānde	
Pa.part.	gegān	

In the pres.1&2pl. the form is usually *gā* before a pronoun, see §6.7. There are differing views on the etymology of the pres. stem, and whether it is related to strong *gangan*.¹ Most likely the root is cognate with that in reduplicated Grk *κίχημι* ‘I reach’ < **ghi-ghē-mi*. It is unnecessary to posit an alternative PGmc stem **gai-* to account for OE *ā* in the root, as supposed by, e.g., Flasdieck (1937a: 59–62) and Mottausch (1997, 1998a), see §6.157. Pret. *ēode* is often said to be cognate with Got *iddja*, pret. to *gaggan* ‘go’, but see §6.158; there is nothing comparable in any other Gmc language.

¹ E.g., to Flasdieck (1937a: 54–5) cf. Prokosch (1939: §75c). It is worthy of note that in Got, where there is no direct cognate of *gān* (but cf. Crimean Gothic *geen*), the pret. *iddja* that appears to correspond to OE *ēode* is instead pret. to the verb *gaggan* (= OE *gangan*).

6.157 The non-pret. conjugation of *gān* is obviously parallel to that of *dōn*, §6.152. Another parallel is that, as with *dōn*, forms in verse must often be scanned as disyllabic, but never with a heavy first syllable, e.g. Beo 2034 *on flett gæð*, etc., with frequent verses like Beo 1277b *gegān wolde* but never ***gān wolde*, cf. §6.153. It should therefore be assumed that uncontracted forms have a short root vowel, and this explains how OE *gān* may be derived from PGmc **gæn* rather than **gain*: as with *dōn*, the athematic endings were replaced by thematic ones (hence unlauded 2&3sg. *gæst*, *gæð*), and so the result was, e.g., inf. **gæ-an*, in which shortening would have taken place in WGmc just as in **dō-an*.¹ Either the shortening of **æ* was identified with **a*, as might be expected before the onset of first fronting, since there was no **æ* for it to be identified with, or shortened **æ* was subsequently restored to **a* before **a* in the next syllable, see Hogg (1992b: §§5.35ff.). The former assumption accounts better for 2&3sg. *gæst*, *gæð*, as *-*æ-i-* might be expected to have produced **ē* after loss of hiatus. This account also offers the possibility of explaining the peculiar co-occurrence of *gān* and *gēn* in OHG.² This argument will be laid out in greater detail in a forthcoming publication.

¹ The awkward assumption that the stem **gai-* must be reconstructed in West Germanic beside **gæ-* has long been the usual analysis: see, e.g., Mottausch (1997), with references. That early OE *gān* is to be analysed as a disyllable with a short first syllable was pointed out, on the basis of metrical evidence, by Fulk (1994). Unbeknownst to us in 1994, Kortlandt (1990: 8–9) had earlier proposed that forms like OE *gæþ* can best be explained as originally disyllabic, though he did not suggest that the root vowel before hiatus was short.

² This leads somewhat afield of present purposes, but it may be said briefly that a paradigm with **-i-* in the pres.ind.2&3sg. inflexions and a back vowel in the other inflexions after **a* in the root could very well have produced *ā* beside *ē* within the paradigm, with subsequent levelling in both directions. Umlaut of *ā* < **æ* is not expressed in OHG orthography (it begins to appear as <æ> in MHG), whilst the umlaut of *a* is represented as <e>.

6.158 Pret. *ēode* is usually regarded as cognate with Got *iddja* pret.3sg. < prehistoric Got **ijjǣ(þ)* (?), pret. to *gaggan* ‘go’, both to be derived from the PIE root **(H)ey-*, as in Lat *eō*, inf. *ire* ‘to go’. Doubts remain about whether such a derivation can be maintained for *ēode*, not least because, as observed by Sievers (1900), the pret. is never **īode* or **iade* in Nbr, always *ēode*, *ēade*. If the Got and OE words are not related, determining the derivation of *ēode* may seem futile, in view of the absence of cognates in Gmc.¹ The lack of umlaut in the preterite suggests that whatever the source of the preterite, it was formed according to weak class II or III.² The distribution of *ēod-* and *ēad-* in Ru1 and Nbr is not at serious variance with the treatment of PGmc **eu* in these dialects, see Hogg (1992b: §§5.44–5).³ Thus, the most plausible explanation is that of Cowgill (1960), who reconstructs for the PIE root **ey-* (ignoring any possible laryngeal consonant) a reduplicated perfect **e-óy-e* 3sg., **e-iy-ñt* 3pl. After the Gmc accent shift, PGmc **j* (from **y*) would have been lost after the unstressed vowel in the singular, just as in weak classes II and III, see §§6.108, 6.114. Subsequently, the reflex of the plural stem was generalized in Gothic, and that of the singular in Old English, with refashioning in both languages as a weak verb, in OE by the addition of a dental preterite suffix in a manner analogous to the re-formation of classes II and III described in §§6.108, 6.114.⁴

¹ Cowgill (1960) offers a review of the literature.

² The chief alternative is to suppose, with Holthausen (1903: 342), that pl. *ēodon* reflects PIE **é-wdh-ñt*, an augmented, zero-grade aorist to the root reflected in Lat *vādere*, OE *wadan* ‘go’. This is the solution favoured by Flasdieck (1937a: 63), but, brilliant as it is, it faces some difficulties, inasmuch as verbal augment is nowhere else reflected in Gmc, and as OE *wadan* shows, the root is PIE **-weHd-*, which should yield reduced rather than zero grade in ablaut. Mottausch (1994) provides a convenient summary of the divergent views, though in all but details his own solution does not seem an improvement on Cowgill’s. Schumacher (1998) does not address the feasibility of Cowgill’s explanation, but he proposes that PGmc **ej-* ‘go’ had a pret. **ēj-* by analogy to **āt-* ‘ate’, and to pret.1&3sg. **æ*, endings of the second weak class were added in Pre-OE.

³ Flasdieck (1937a: 63) reports the following figures for *ēod-* : *ēad-* in the relevant texts: DurRitGl 0 : 10, Li 116 : 117, Ru2 98 : 8, Ru1 103 : 3. Cf. also ErfGl 1.76 *ġeēadun*.

⁴ For further references, see Rix (2001: 233n15).

6.159 A notable morphological innovation is that Nbr has, instead of the strong pa.part. *ġegān*, a weak *ġeēad*, based on the preterite; the pa.part. is unattested in Merc. Otherwise, aside from the variants already mentioned, the non-WS dialects have only such departures from the paradigm in §6.156 as might be expected on the basis of regular phonological developments and parallels in *dōn* and other verbs. These include occasional uncontracted spellings, e.g. PsGl(A) *ingǣe* pres.subj.1sg., *forðġāa* imper.sg. (cf. very frequent *dōa*), with much variability in the unstressed vowels in Nbr, e.g. Li *gǣe*, *gǣæ* 1sg., *ġegǣas*, *gǣes*, *gǣæs* 3sg., etc. PsGl(A) *ġeondgān* pres.ind.1sg. may be an error for **-gām* (cf. OHG *gām*), or perhaps **-gāu*, with the Angl inflexion *-u*, as suggested by Campbell (1977: §768(c)). Umlaut is preserved exceptionally in the pres.ind.2&3sg. in Angl, e.g. Li *ofġǣstu* 2sg., *gǣð*, *gǣs* 3sg., whence *ǣ* may be extended analogically to other forms, e.g. *gǣ* 1sg., inf., *gǣð* pres.pl.¹

¹ This analogical extension proves the point (that *ofġǣstu*, etc., contain /æ:/) in the face of the objection of Brunner (1965: §430A3) to the evidence of *gǣs*, *gǣð*, etc., the objection being that <æ> here may represent uncontracted *ae*, given that <ae> in Nbr texts is often used to represent *æ*.

4 *The verb willan*

6.160 In WS the verb *willan* ‘wish, will’ is normally inflected as follows, with such variations in the inflexions as are encountered in other verbs, see Hogg (1992b: §§3.11–30):

Present	Indicative	Subjunctive
Sg. 1	wille	wille
2	wilt	wille
3	wile	wille
Pl.	willað	willen
Preterite		
Sg. 1	wolde	wolde
2	woldest	wolde
3	wolde	wolde
Pl.	woldon	wolden
Infinitive	willan	
Pres.part.	willende	

No inflected infinitive is attested, nor any imperative or past participle; but cf. PsGl(A) negated imperative *nyl* (3×), also in PsGl(B) (2×). The other Psalter glosses use subj. *nelle*, *nylle* for the negated imperative. In the pres.1&2pl. the form is usually *wille* before a pronoun, see §6.7.

6.161 The verb is cognate with Lat *volō* ‘I wish’; its original athematic form is indicated by Lat *vult* 3sg. Due to frequency of polite, therefore subjunctive, usage, in Gmc the original subjunctive (PIE optative, see §6.2n1) forms replaced the indicative. The PIE athematic optative suffix **-ī-* was added to the stem **wel-*, followed by the usual inflexions, hence PGmc 2sg. **wel-ī-s*, 3sg. **wel-ī-þ*, the latter reflected as OE *wile*. But thematization of the verb set in early, and in WGmc thematized **wel-ī-ō* 1sg., **wel-ī-anþ* 3pl. developed to **wiljō*, **wiljanþ*,¹ hence the gemination in *wille*, *willað*. Subsequently, new optatives of the ordinary type were formed on the basis of the stem *will-*. As for the 2sg., *wilt* is formed by analogy to pret.-pres. verbs, and unsurprisingly, since *willan*, like many of them, has auxiliary function; cf. more original OSax *wili(s)*, OHG *wili*, but OFris *wilt*, *welt*. As Got *wilda* pret.3sg. illustrates, the dental marker of the pret. was added directly to the root, without intervening suffix, unlike in the regular weak verbs, demonstrating an affinity with the pret.-pres. verbs, see §6.141. The vocalism of OSax *welda* (beside *wolda*) thus could reflect the original situation; but OE *wolde*, OSax *wolda*, OHG *wolta* show replacement of the original pret. vocalism by analogy to semantically and morphologically parallel WGmc **skuldæ* (giving OE *scōlde*, etc.).²

¹ Thus Prokosch (1939: §75d). However, as the phonological development cannot be authenticated, alternatively it would be possible to assume that the verb was re-formed in the same way as verbs of classes II and III, with **-jō*, *-janþ*, etc., substituted for the earlier endings, see §§6.108, 6.114.

² Flasdieck (1937b: 28–30) and others would instead explain *o* from PGmc **u* as arising in the reduced grade of the PIE root **wl-*, which is hardly a necessary assumption, especially given that East and North Germanic both reflect a Gmc pret. stem in **wel-*.

6.162 In LWS the verb is often spelt with <y> in the present. Nbr usually has pres.ind.1sg. *willo*, but cf. also Li *wille*, *will*, *wællō*, *wælle*; Kt has the corresponding *willa* < *willu*, and cf. Ch 1508 (HarmD 10) 47 *willio*. Occasionally the pres.ind.3sg. is *wille* rather than *wile* in WS, e.g. ÆHom 18.105, ÆHomM 2 (Irv 3) 86, though never in the best Ælfric manuscripts, as well as in EWS CP (e.g. 13.75.22) and Kt Ch 1197 21.¹ It is not always possible to rule out the possibility that *wille* is a subjunctive. Conversely, Ru1 has only *wile* for pres.ind.3sg, whilst Nbr has *wil(l)*, including LRid 11 *uil*. Occasional forms with <e> in the root are found in Angl, e.g. PsGl(A) *wellende* pres.part., Ru1 *wellaþ* imper.pl., Li, Ru2 *welle* subj., beside Li, DurRitGl *wælle*, also Li *wælde* pret.subj. The Angl pret.ind. is *walde*, see

Hogg (192b: §5.34), and <a> is found in some other forms, as well, thus Nbr *wallað*, *wallas* pl. beside Li *uallon* (1×).² It is, it may be seen, almost exclusively outside the pres.ind.sg. that spellings with <a>, <æ>, <e> are found. Flasdieck (1937b: 24–42) explains forms with <a> as reflecting the root seen in Got *waljan* ‘choose’, and those with <æ> or <e> as having the umlaut of this; see also Kortlandt (1986b). But <a> may also be explained as having originated phonologically in the pret., see again Hogg (1992b: §5.34). The matter remains unresolved.

¹ The figures supplied by Flasdieck (1937b: 19) for the incidence of 3sg. *wille* are unreliable, as they include forms that may be subjunctive.

² Also MkGl (Ru) 10.35 *wallon we*; cf. negated 6.50 *nallon ġe*, Li *nallo we*.

6.163 On the WS synthetic negated forms *nyllan*, *nellan*, *nolde*, etc., see Hogg (1992b: §5.152). AnGl forms are comparable to the non-negated verb, e.g. PsGl(A) *nyllað*, *nalde*, Nbr *nallað*, *nallas*, *nalles*, *nællað*, etc. Nbr never has <y>, except DurRitGl *nylt* 2sg., but cf. Li *nuilt*, also *nwill ic*, *nuillic* pres.ind.1sg., comparable to Ru1 *nyllic*.

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Word Index

Only Old English words are indexed. The alphabetical order follows normal usage except in the following particulars:

- (1) <æ> is placed after <a>, and <þ> is placed after <t>. Variant graphs, for example <ae> for <æ>, <ð, th> for <þ>, <u, uu> for <w> are not distinguished in order.
- (2) The prefix <ġe-, ġi> is ignored in alphabetization, but all other prefixes are appropriately ordered.
- (3) Where variant elements in head-forms are indicated by round brackets in the head-form itself, the full spelling determines the alphabetical order, except in the case of such alternative spellings as are due to palatal diphthongization of back vowels after (s)c̣, for example <sc̣(e)acan> where the order is determined by the variant <sc̣acan>.

Words are normally indexed under a head-word according to Late West Saxon norms, with the exception that some individual forms are indexed separately where that is the only form discussed. The head-word is usually cited in its nominative singular (masculine) form for nouns and adjectives; if a head-word is not nominative singular, this is indicated. The head-word given for verbs is the uninflected infinitive, except for preterite-present verbs, for which the head-word is the present indicative 3 singular. If no such form is attested in OE, then this is indicated by an asterisk. In the case of first- and second-person pronouns, the singular and plural (dual) forms are not separately indexed.

In entries for verbs, the pres.ind. is to be assumed initially (after the usually inf. head-word) and thenceforth, as well as after such a specification, until a different tense or mood is indicated. Verbs with prefixes are generally listed under the simplex, as long as the simplex is treated in the grammar.

Where different inflexions are usually identical, as in nominative and accusative plural forms, the form is indexed under the major form. Similarly, the gloss ‘pret.3sg.’ usually refers to both first and third persons singular without distinction. Case, gender and number are not indicated for past participles.

Where difficulties might arise, the head-word is often cross-indexed. However, cross references are not normally given for inflected forms of head-words, or where the variation is general. Variant spellings discussed in the text are often indicated within round brackets immediately after the head-word, for example ‘abær (e)’ for *aber*, but the absence of such indication has no significance and especially should not be taken to imply the absence of any such variation.

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