CHAPTER 4

EARLY IRISH

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The term 'Early Irish' as used here embraces the various stages of the Irish language from prehistoric times until the twelfth century AD, of which the Old Irish stage is the best known. The period under review here is framed by two terminal points of great cultural significance, the advent of Christianity in the third or fourth centuries and, in the twelfth century, 'Europeanization' through the Anglo-Norman invasion and the church reform. For a general history of the Irish language, see Greene 1966.

The native designation for the language in Old Irish was *Goídelc*, a derivative of *Goídel* 'Irishman'; both terms are early medieval loans from British. The earlier self-designation of Irish and the Irish is unclear. In Latin the language was called *Scottica (lingua)* after the early medieval Latin name for the Irish, *Scotti*. In historical linguistics the term 'Goidelic' is used, especially in comparison and contrast with 'Brittonic' or 'Brythonic', the British branch of Insular Celtic, and the Continental Celtic languages. Reflecting the major changes undergone by the language during this time-span, the following main phases can be distinguished (cf. also Greene 1977, Koch 1995, Russell 2005):

Early Goidelic: *c.* pre-4th century
Primitive Irish: *c.* 4th–6th centuries
Archaic Irish: *c.* 7th century
Old Irish: *c.* 8th–9th centuries
Middle Irish: *c.* 10th–12th centuries

A broad correlation of these phases can be made with types of sources. The Early Goidelic phase before the dawn of the Christian era is accessible only in reconstruction, apart from a handful of local and tribal names in Ptolemy's *Geography* II 2 (De Bernardo Stempel 2000: 100–102) that rather pose questions than provide answers, as is typical of such evidence. The small corpus of Primitive Irish is attested exclusively in inscriptions on stone written in the alphabet known in Old Irish as *Ogam* /oɣəm/ (Modern Irish *Ogham* /oːm/). Archaic Irish is an early variant of Old Irish. It is directly tangible only in stray names and words in Latin texts, but a considerable portion of texts, poetical and prose, that survive in much later manuscripts probably originate in this period. Old Irish is directly attested in the vernacular glosses and marginalia found in Latin vellum manuscripts of the eighth and ninth centuries. Middle Irish, the transitional period from the one standard language, Old Irish, to the other, Modern Irish, is the medium of several great medieval Irish

manuscripts, the earliest of which date from the twelfth century. After 1200 we speak of 'Early Modern Irish'. This chapter will be concerned mainly with an account of the classical Old Irish language. Short sections at the beginning and at the end will be devoted to Primitive and Middle Irish.

Since the early medieval period, the language has not been confined to the island of Ireland alone, but has expanded to the west and north of Britain, to the Isle of Man, and to islands north of Britain, perhaps as far as Iceland. The native literature contains ample evidence for traffic and interaction between the parts of the early Irish-speaking world, but apart from a few lapidary inscriptions no records of Goidelic from outside Ireland have survived from before the beginning of the modern period.

Early Irish is a dynamic field of study where a considerable amount of coal-face work in lexicography, diachronic and synchronic grammar, philology, and literary studies has still to be done, and important linguistic tools are still wanting. Many texts are still awaiting their first scholarly edition. Because of its structural and grammatical extravaganzas, Early Irish, having been studied preponderantly by historical linguists, is also a worthwhile object for the application of modern linguistic theories.

PRIMITIVE IRISH

The written record of what is incontrovertibly Irish begins with epigraphic evidence in the fourth or fifth centuries, the putative date of the earliest Ogam inscriptions. The inscriptions are found on standing stones with a sharp vertical edge which serves as a base-line for the incised letter-forms of the Ogam alphabet. Its characters consist of strokes or notches positioned in relation to the base-line, as shown in Figure 4.1. In its oldest form the alphabet comprises twenty characters. Fifteen consonants are represented by three groups of one to five strokes incised to the right, left or across the edge of the stone. Five vowels are created by groups of one to five depressions, directly in the vertical edge itself. Consonant signs are frequently geminated with somewhat unclear motivation (but see Harvey 1987). The texts known up to then are edited in Macalister (1945); more recent findings are collected in McManus (1991), who also sheds light on the material and historical aspects of Ogam. Ziegler (1994) describes the language of the Ogam inscriptions. The Ogam stones from Britain are discussed by Sims-Williams (2003). An online database for Ogam was begun at: http://titus.uni-frankfurt.de/ogam/frame.htm (Gippert 1996–2001).

The brief texts typically contain a personal name, followed by a patronymic or gentilic name, all in the genitive case. Very rarely more information is given, as in this late example:

QRIMITIR RON[A]NN MAQ COMOGANN
'[stone] of the priest Rónán, the son of Comgán'

Such minimal texts yield data only for phonology and, to a very limited degree, nominal morphology. Typologically, Primitive Irish is an inflected language with overt endings, akin in its grammatical system rather to ancient Indo-European languages than to Old Irish as known from the manuscript tradition. The corpus of Primitive Irish is meagre: around 400 stones are known, in Ireland (more than 75 per cent), and in Britain (see the map in McManus 1991: 46, 48). Most scholars are agreed that the creators of Ogam drew on a knowledge of Latin grammatical discourse. Letters unnecessary for the notation of Irish sounds, such as ‹p› and ‹x›, are omitted. A distinction between vowel *u* and
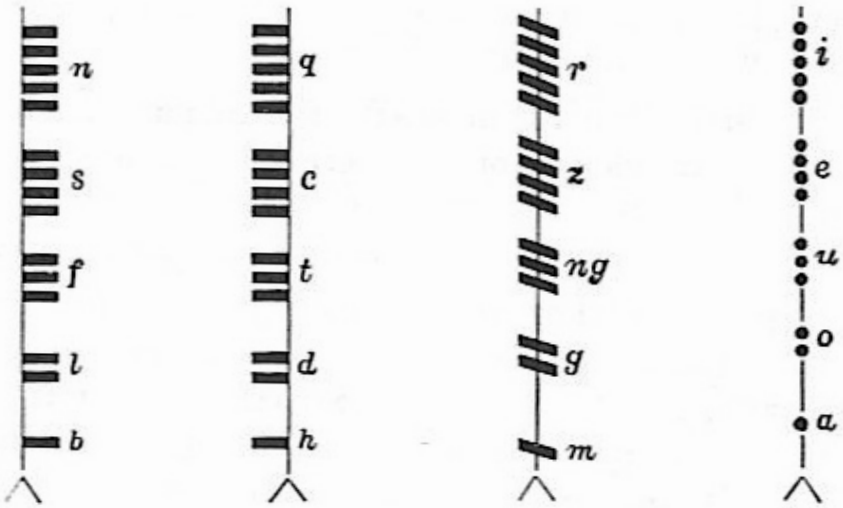
Figure 4.1 The Ogam alphabet and its medieval transliteration. Source: Thurneysen (1946: 10) by permission of the Dublin Institute for Advanced Studies, School of Celtic Studies

consonant *w* is added. An idiosyncratic, but perhaps phonologically motivated, ordering of the vowels is introduced. The shortcoming of the Latin alphabet to reflect the length opposition in vowels has been retained in Ogam. The actual cradle of Ogam may have been the Irish settlements in Britain (Charles-Edwards 1995: 722). The practice of making Ogam inscriptions continued over perhaps 200 years and waned in the sixth or seventh centuries. Absolute dating of the Ogam inscriptions is not feasible, as no named individual has so far been reliably identified as a historical figure. A relative dating can be achieved by establishing a chronology of the sound-changes reflected in the inscriptions.

PHONOLOGY OF PRIMITIVE IRISH

The traditional values of the letters, preserved in medieval manuscripts, are not necessarily original, i.e. they are neither those of the period in which the script was devised, nor those of the early period of the inscriptions themselves. That this is so is revealed by the allocation of the value F to the third letter. In Irish–British bilingual stones, however, this symbol is equated with Latin V, and historical reconstruction shows that its realization must have been /w/. Three other values – H, NG, and Z – which do not occur in any inscription, are also suspect. On structural and etymological grounds scholars are agreed that the letter transliterated NG originally stood for the voiced labio-velar /gʷ/. For H and Z the original values /j/ and /sʲ/ have been suggested (McManus 1991: 36–8, 85). Applying these values to the first three groups in Figure 4.1 above gives the new transliteration as in Table 4.1.

Table 4.1 Modified transliteration of Ogam consonantal symbols

5. N	10. Q	15. R
4. G	9. C	14. S^T
3. W	8. T	13. G^W
2. L	7. D	12. G
1. B	6. J	11. M

Since the sounds now assigned to the three problem letters H, Z, NG were lost at an early date, it would appear that Ogam was developed for a stage of the language anterior to that of even the oldest inscriptions. Accordingly the fourth century is taken as *a terminus post quem non* for the invention of the system (McManus 1991: 41). On this basis the consonantal phonemic system of the earliest Ogam inscriptions can be drawn up, as shown in Table 4.2.

Table 4.2 Consonantal phonology of Early Primitive Irish

	plosive	nasal	fricative	glide	liquid
bilabial	b	m		w	
dental	t d	n			l r
alveolar			s (s^t)		
palatal				j	
velar	k g				
labiovelar	k^w g^w				

The nasals and liquids could also be geminated. There is a gap in the phonological system in that *p* is absent through its loss in the Common Celtic period. In loanwords, *p* is substituted by the nearest sound available, the labiovelar *k^w*, e.g. VulgLat. **prebiter* 'priest' → PrimIr. QRIMITIR (delabialized in OIr. *cruimther*).

There are ten vowels, short and long *a, e, i, o, u*, and two diphthongs, written *ai* and *oi* (Table 4.3).

Table 4.3 Vowels of Early Primitive Irish

	front	back
close	i i:	u u:
mid	e e:	o o:
open		a a:

During the period of the Ogam inscriptions the Irish language underwent a series of radical sound changes that led to a complete transformation of the phonemic system. However, the constraints of the spelling system precluded the explicit expression of many of these changes, especially lenition and palatalization. The (deducible) phonology of the latest stones overlaps with that of the earliest manuscript Irish.

OLD IRISH

Old Irish is the earliest period of Irish – or of any Celtic language – for which the extant record is sufficiently full and varied to permit a full synchronic description. Its great significance for both Indo-European and Celtic linguistics derives from the facts that under a heavily modernized phonological veneer resides morphology that in certain regards is very archaic, and that at the same time the language can serve as a model for all younger Insular Celtic languages, in that their notorious syntactic, morphophonemic, and morphological peculiarities are present in a systematic manner and can thus be studied as if in a nutshell.

Despite being a large-corpus language, only a very small and thematically restricted portion of what survives of the Old Irish textual production is contained in manuscripts of the period. The three most important collections of these are not kept in Ireland, but on the European continent. They are known by the present locations of the manuscripts: Würzburg (Wb.), Milan (Ml.), and St Gall (Sg.), containing glosses on the Pauline Epistles, a commentary on the Psalms, and Priscian's *Institutiones* respectively. The glosses are edited in Stokes and Strachan (1901–3). This body of primary source material is large enough to have formed the basis of all grammatical descriptions of Old Irish so far, in particular Thurneysen (1946), the standard grammar of Old Irish. Even today, most linguistic studies of Old Irish start with the glosses. The language established on the basis of these primary sources furnishes a yardstick with which to assess the abundant literary production of the medieval period, which belongs to a wide range of genres (historical, legal, narrative, religious, both in prose and poetry). However, this very considerable body of texts survives in vellum and paper manuscripts from much later periods only, from the twelfth century onward, becoming numerous only in the modern period (surveys of the literature are Ó Cathasaigh 2006 for Old Irish and Ní Mhaonaigh 2006 for Middle Irish). The evidence of later manuscripts for the original forms of texts must be treated with caution, as the process of repeated copying can give rise to errors and conscious or unconscious linguistic modernization. In effect, in many texts older and newer forms stand inextricably side by side, which renders them less suited as a source for grammatical descriptions than the glosses, despite the latters' very dry content.

Apart from Thurneysen 1946, Pedersen 1909–13, Lewis and Pedersen 1961 and McCone 1994 are useful descriptions of the whole grammar of Old Irish. Strachan 1949 serves as a quick reference book for inflectional forms. The lexicon of Old and Middle Irish is collected in the *Dictionary of the Irish Language* (DIL); its publication as an electronic online resource has been a great boon (eDIL at http://www.dil.ie/index.asp = Toner 2007). For the Würzburg glosses, a special dictionary was compiled by Kavanagh (2001). A similar dictionary for the Milan glosses is in the process of completion (Griffith and Stifter (forthcoming)), and others may follow. The publication of an etymological dictionary of Old and Middle Irish, *Lexique étymologique de l'irlandais ancien*, has been going on since 1959 (Vendryes et al. 1959–). Modern introductions to Old Irish for beginners are McCone (2005), Stifter (2006), and Tigges and Ó Béarra (2006). Collections of electronically processed texts are *CELT (Corpus of Electronic Texts)* at http://www.ucc.ie/celt/, *Thesaurus Linguae Hibernicae* at http://www.ucd.ie/tlh/, *The Celtic Digital Initiative* at http://www.ucc.ie/academic/smg/CDI/, and *The Celtic Literature Collective: Irish Texts* at http://www.maryjones.us/ctexts/index_irish.html. Images of Irish manuscripts are accessible at *ISOS (Irish Script on Screen)* at http://www.isos.dias.ie/ and at *Early Manuscripts at Oxford University* at http://image.ox.ac.uk/.

Since this is a synchronic description of the language, diachrony will be kept to a

minimum. It must be kept in mind, though, that Old Irish is almost prototypical for a language whose grammatical behaviour cannot be described adequately by synchronic rules. The bewildering complexities of some of its grammatical subsystems, especially that of verbal morphology, become transparent only when viewed from a diachronic position, and in order to understand allomorphic variation correctly it is essential to work with underlying forms and their often quite dissimilar surface representations; e.g., both *do·sluindi* /doˈslunʲdʲi/ '(s)he denies' and negated *ní·díltai* /ˈdʲiːlti/ '(s)he does not (*ní*) deny' regularly reflect the same diachronically underlying structure **dī-slondīθ*, the variation being triggered by a difference in stress pattern. Only the broad outlines of Old Irish grammar can be sketched here. Subtle details – in which the language abounds – have to be glossed over.

There is little or no trace of synchronic variation in the Old Irish literary tradition, what variation exists being mostly stylistic rather than geographical (Kelly 1982, McCone 1989). This presupposes either the early adoption of a specific local variety as the basis for a standard, or the early codification of a standard grammar. The sporadic appearance already in the glosses of features of phonology, morphology and syntax which only become prominent in the Middle Irish period after the tenth century (McCone 1985), suggests that the dominant register in these texts is a conservative literary standard at some remove from the spoken language, and perhaps one generation older than the earliest attested texts.

Old Irish is a consistent VSO and head-initial language: apart from sentence-initial verbs, it has adjectives and genitives following their head nouns, prepositions and postposed relative clauses. The verb has attracted many functional elements of the sentence into its domain. Old Irish is a pro-drop language. It is predominantly dependent-marking, but where pronouns are involved it has become head-marking (Griffith 2008b). Old Irish distinguishes the three grammatical genders masculine, feminine, neuter. Among nouns it distinguishes three numbers, singular, dual, and plural, while adjectives, pronouns and verbs only make the two-way distinction of singular and plural. It is an inflecting language, but while the inflection of verbs is largely achieved in a traditional manner by the addition of overt fusional endings, in the domain of nouns there is a marked tendency for inflection being effected by changes of the root vowels, by alternations in the quality (palatalization vs. non-palatalization) of final consonants, by mutational effects on other words, and by complex combinations of all these, e.g. nom. sg. *in fer trén* /in fʲer tʲrʲeːn/ 'the (*in*) strong (*trén*) man (*fer*)' vs. nom. pl. *ind fir thréuin* /ind irʲ θʲrʲeːwnʲ/ 'the strong men'. In fact, erosion of inflection has already set in in Old Irish: among personal pronouns, inflection is no longer found, but has been replaced by a very different system where the syntactical position determines the form and function of the pronouns.

The basic lexical stock of Old Irish is inherited from Indo-European and Common Celtic, but the language contains also strata of (probably prehistoric) loans from unidentifiable sources (e.g. Schrijver 2000, 2005, Mac Eoin 2007), and, in the historic period, numerous loans from Latin (McManus 1983), British Celtic (mainly Welsh), and, in the later period, from Norse (Sommerfelt 1962). English and French loans are rare in Old Irish and become numerous only in Middle Irish and later.

PHONOLOGY

By a cursory inspection, the sound systems of Early Primitive Irish and of Old Irish hardly resemble each other. This is due to a great number of major sound changes, which the

language witnessed mainly in the fifth and sixth centuries, roughly at the same time when the British languages were similarly affected. The contemporaneous Ogam inscriptions are valuable in this respect because they directly reflect some of the transformations that the language went through prior to the emergence of Old Irish. Occasionally the changes can be illustrated by one and the same name from different periods. The name that is written gen. LUGUDECCAS on an early Ogam stone (CIIC 263) is found as LUGUDUC on a late one (CIIC 108). The differences are due to *apocope*, i.e. the loss of the final syllable, and to *vowel reduction* in the third syllable. In the corresponding OIr. form *Luigdech* we note yet further changes: the middle vowel has undergone *syncope*, i.e. has been elided, and the word-internal cluster has become *palatalized*. What is only partly revealed by the spelling is that all internal consonants have been subjected to *lenition*: the original velar stop *C* /k/ has become the corresponding fricative *ch* /x/, likewise the stops *G* /g/ and *D* /d/ have been fricativized to /ɣ/ and /ð/, although this is not immediately visible. With these three forms, almost all major pre-Old Irish sound changes have been illustrated.

The diachronic developments that led from Proto-Indo-European via Common Celtic to Old Irish are sufficiently well understood (the most important of these are conveniently summarized in McCone 1996). Only fine tuning remains to be done in some cases. Important developments are the extensive, albeit not entire, loss of final syllables (apocope), loss of medial vowels (syncope) and concomitant consonant changes, lenition and – to a lesser degree – nasalization, metaphony of vowels before other vowels (raising and lowering) and palatalization. The cataclysmic series of phonological changes had the double effect of transforming the phonemic inventory as a system and of transforming the character of the language as a whole. These two sides of one coin are best treated separately.

The sound system

The two processes – lenition and palatalization – multiplied the number of consonantal phonemes. While Primitive Irish had thirteen (or fourteen) such phonemes, Old Irish has forty-five.

Lenition ('softening', from Lat. *lenis* 'soft') as a historical process means the reduction in the energy employed in the articulation of obstruent sounds and in consequence their fricativization: *t, k, b, d, g > θ, x, β, ð, ɣ*. The opposition unlenited vs. lenited was at first allophonic, but became phonemic with the losses of final and medial syllables (apocope and syncope). This affected all Primitive Irish single stops between vowels and most stops between vowels and *l, n, r*, whether in medial, initial or final position. The continuants *s* and *m* became *h* and *β̃* respectively. Although not originally part of this package, *p, w, l, r, n* were also integrated into the resultant binary opposition unlenited vs. lenited. The marginal lenition of the loan phoneme *p* (> *ɸ?*) > *f* was introduced in analogy to the other voiceless stops. For the liquids and *n*, a different strategy was chosen. The inherited articulation was reinterpreted as the lenited member of the oppositional pair; in unlenited positions, the liquids and *n* were strengthened and merged with their inherited geminated counterparts. The precise phonetic effect of this strengthening cannot be recovered, but it is likely to have involved length, tenseness or fortis gemination. Thus *n, r, l* gave rise to *n:, r:, l:*. Finally, *w* behaved in yet an entirely different way. In unlenited initial position it became *f* by sandhi-phenomena. In some unlenited internal positions it merged with *β*, but otherwise, especially when lenited, it was ultimately lost. For that reason, the lenited member of the oppositional pair involving *f* is zero, Ø. The only consonant standing outside the opposition unlenited vs. lenited is *ŋ*, which can only appear in unlenited contexts. The effects can be gauged by the changes undergone by a number of early Latin loan words, as shown in Table 4.4.

Table 4.4 Lenition of *b*, *k*, *d*, *g*, *m*, *t* in early Latin loans

lebor /lʲːeβər/ 'book'	< *liber*
bachall /baxəlː/ 'crozier'	< *bacula*
muide /muðʲe/ 'vessel'	< *modius*
faigen /faɣʲən/ 'sheath'	< *vagina*
sollumun /solːuβ̃un/ 'festival'	< *sollemne*
srathar /srːaθər/ 'pack-saddle'	< *strātūra*

All consonants also stand in a binary opposition of non-palatalization (neutral quality) vs. palatalization, except for *h*, for which this cannot be demonstrated. The palatalized sounds are the marked members of the opposition; because of its markedness, the feature palatalization, which is traditionally referred to as consonant quality, has been spreading beyond its original confines throughout Irish-language history. Conversely, consonants in unstressed words such as the copula, prepositions, particles, etc. were depalatalized in early Old Irish. As in the case of lenition, palatalization was originally allophonic, but gained phonemic status after apocope and syncope. For word-initial consonants an allophonic status of palatalization must be assumed until the Middle Irish period, but for simplicity's sake the opposition will be presupposed here also in this position. Consonant clusters must be of the same quality, which in the case of secondary, i.e. non-inherited, clusters depends on the type of vowel lost between the consonants. Syncopated and apocopated *a* and *o* depalatalized the surrounding consonants, *e* and *i* palatalized them. *u* basically behaved like *a* and *o*, but caused palatalization if it in turn was followed by a palatalized consonant. Older scholarship distinguished a third, velarized series of consonant quality (marked ᵘ) beside the neutral and palatalized series, but the evidence advanced in favour of this hypothesis is better interpreted as forms with a distinct vowel quality *u* beside neutral, i.e. non-palatalized, consonants, e.g. *techtugud* 'taking possession' = /tʲextuɣuð/, not /tʲextᵘəɣᵘəðᵘ/.

Less pervasive changes between Primitive and Old Irish, which nonetheless altered the overall appearance of the system, are: loss of the labio-velars *kʷ* and *gʷ* through delabialization and merger with the corresponding velar stops; loss of *j*; merger of *sᵗ* (if it ever was a phoneme) with *s* word-initially and with *ss* word-internally. The gap in the labial series was filled by the development of a new Irish *p* word-internally through internal processes and word-initially through the adoption of Latin and British loanwords. A new phoneme *ŋ* arose from the simplification of *ng* = /ŋg/ during the Old Irish period. The foregoing processes resulted in the sound inventory shown in Table 4.5.

Table 4.5 Consonantal phonology of Old Irish

	plosive	nasal	fricative	liquid
labial	p b pʲ bʲ	m mʲ β̃ β̃ʲ	f β fʲ βʲ	
dental	t d tʲ dʲ	nː n nːʲ nʲ	θ ð θʲ ðʲ	lː l lːʲ lʲ rː r rːʲ rʲ
alveolar			s sʲ (= ʃ?)	
velar	k g kʲ gʲ	ŋ ŋʲ	x ɣ xʲ ɣʲ	
glottal			h	

IPA-signs are used here to render the OIr. sounds. However, in scholarly literature on Old Irish different, proprietory notational systems are often used that are better suited to visualize the systemic character of the OIr. phonemic inventory than IPA is. For example, in Stifter (2006: 16–19), Greek letters are used for all lenited sounds (ɸ, θ, χ, β, δ, γ, λ, ρ, μ, ν) except for *h*, and Latin lower-case letters stand for the unlenited sounds, even for the liquids and nasals (*l*, *r*, *m*, *n*). In other systems of transcriptions lenited *b* is written *v*, and *ṽ* stands for lenited *m*; the unlenited liquids and nasals are written *L*, *R*, *N*. Consonants of the palatalized series are frequently marked with the diacritic ' instead of ^j.

The vowel system is comparatively simple (see Table 4.6). At the core is a standard inventory of five vowels, which all participate in length opposition (here marked with ː, but often macrons are used, e.g. *ā*). Especially in the case of *a*, it may be that the opposition was not only one of length, but was also accompanied by one of openness. It is possible that there were two different, albeit non-contrasting, long-*e* phonemes at least in early Old Irish, but they eventually merged. The central, neutral vowel schwa is short only. It is possible that there was a rounded, front short vowel *œ* (or *æ*), but its marginal existence can only be inferred from the graphic alternation *ai*, *au*, *e*, *i* in some words, an alternation that is difficult to explain otherwise. The existence of *y* as an allophon of *u* before front vowels can only be reconstructed for Primitive Irish. Its survival into Old Irish is possible, but cannot be demonstrated.

Table 4.6 Vowels of Old Irish

	front		**back**
close	i iː (y)		u uː
	eː		
mid	e (œ)	ə	o oː
	(ɛː)		
open	a	ɑː	

Old Irish is rather rich in diphthongs, but most of these were eliminated during the Old and Middle Irish periods (cf. Greene 1976, Uhlich 1995): of the inherited diphthongs, *a(ː)w* (perhaps with a mid-long or long vowel *a*) early became *oː*; *oj* and *aj* fell together towards the end of the Old Irish period and were eventually monophthongized in a long *e*-like vowel, which remained distinct from *eː* and is reflected by different outcomes in the modern dialects. Only *iə* and *uə* have survived until today. Besides, in Archaic Irish the short vowels *a*, *e*, *i*, *o* combined with *u* to give new diphthongs, which eventually were all eliminated by shifts in the syllable peaks and were monophthongized to short (!) vowels. In particular, the outcome of short *aw*, which became *u*, is different from inherited *a(ː)w* above. Early Old Irish tolerated hiatuses when the first vowel belonged to the stressed syllable, cf. the minimal pair *fíach* /fʲiəx/ 'debt' vs. *fiach* /fʲi.əx/ 'raven'. Already during the Old Irish period hiatus sequences merged either with diphthongs or with long vowels.

The vowels are not evenly distributed. In the stressed internal syllable all vowels and diphthongs except schwa occur, but in unstressed, non-final syllables only schwa and short *u* are possible. Long vowels do occur, but are fairly rare in this position. In unstressed absolute final position, only short vowels are possible. In stressed absolute final position vowels are automatically lengthened (Breatnach 2003). Pretonic syllables are yet another

story, because in them only a reduced inventory *i* – *a* – *u* is found. Although the vowel inventory as such had remained stable from Primitive Irish, there is a distinct difference in the functional weight awarded to that class of sounds. In Primitive Irish the phonological load lay evenly balanced on consonants and vowels alike, but distributional restrictions in the use of the vowels in Old Irish, especially the loss of the independent quality of short vowels in unstressed internal syllables and the concomitant introduction of schwa as a phoneme, resulted in a system where consonants were given greater phonological prominence than vowels. Ongoing neutralizations and erosions in the distributional rules for vowels throughout the attested history of Irish continued to shift the load further towards the consonants.

The above sound inventory of Old Irish is an idealization. The phonological system was constantly undergoing subtle restructurings that eventually led to the transformation of Old Irish to Middle Irish.

Stress

OIr. stress is non-contrastive and cannot be used to award prominence to a phrase. It is dynamic and fundamentally fixed on the first syllable of a word. To this there are systematic exceptions: adverbs which have their origins in the merger of the article or prepositions and a nominal form bear the stress on the first syllable of the latter, e.g. *indíu* /indʲˈiw/ 'today' (= article + a case form of 'day'), *immallé* /iməlˈeː/ 'together' (= preposition 'around' + article + a word for 'side'). More importantly, verbal forms that have any element (conjunctions, verbal particles, lexical preverbs) before their root syllable bear the stress on the second element of the entire 'verbal complex', whether this be the root or a preverb. In modern normalized orthography the position after which the verbal stress falls is indicated by a raised dot · or a hyphen – or a plain space (e.g., *ad·cí*, *ad-cí*, *ní accai*). Articles, prepositions, conjunctions and various types of pronouns and pronominals are unstressed. Indeed, these can be regarded as pro- and enclitic to stressed words. Early Irish scribes used to write unstressed elements without separation from adjoining stressed words, a practice not followed by modern editors.

MORPHOPHONEMICS

Several of the major diachronic phonological rules mentioned at the beginning acquired synchronic grammatical functions, putting a stamp on Irish which it retains to the present. What to all extents and purposes must have been a language of average Indo-European typology was converted into a rather different system, non-Indo-European by outward appearance, in which modifications of initial and final consonants as well as of internal syllables play a key morphological role. Some of these sound rules have wider structural implications: palatalization and the two major types of initial mutation, lenition and nasalization. They have repercussions beyond the remit of phonology, to the extent that what started out as allophonic variations in consonantal quality acquired morphophonemic status when the conditioning factors disappeared with the loss of final syllables. Other changes, syncope and metaphony, have a rather restricted capacity of making morphological distinctions, but are all-pervading nevertheless.

Palatalization

The role of palatalization and the loci where it could apply were constantly spreading in the prehistory of Old Irish (Greene 1973, McCone 1996: 115–19). Of particular relevance for the present section is that the apocope of inherited inflectional endings in Primitive Irish had left certain traces on the rest of the word, depending on whether the lost syllable had contained a back or a front vowel. While in the former case the remaining, now final consonant retained its neutral quality, in the latter case the consonant acquired a distinctive palatalized colour. What had before been a difference in endings, e.g. nom. *karrah*, gen. *karrī* 'cart', was transformed into a functionally loaded difference of quality, nom. *carr* /karː/, gen. *cairr* /karːʲ/. In that manner, palatalization was established as a morphophonologically relevant process and in consequence it received prominence in other positions, as well. In some cases, difference in quality is concomitant with overt morphemes, e.g. nom. *cnáim* /knaːβʲ/ vs. gen. *cnáma* /knaːβ̃a/ 'bone', or *beirid* /bʲerʲəðʲ/ '(s)he carries' vs. *berait* /bʲerəðʲ/ 'they carry', where the quality of root-final *r* alternates. Palatalization, having thus acquired high phonological prominence as a morphological marker in Old Irish, has been spreading ever since to positions where it has no etymological or morphological justification.

Mutations

A notorious feature of all Insular Celtic languages is the extensive employment of phonemic consonant mutations, i.e. of variations in word-initial position, to carry morphological distinctions, but nowhere are these so fundamentally entrenched in all aspects of grammar as in Old Irish. The mutations operate across word boundaries, but not usually beyond phrase boundaries (NP, PP, the so-called verbal complex): in NPs, an overt element X mutates a following element Y. Mutations inside the verbal complex are more complicated because X may not always be overt. The origins of the initial mutations are external sandhi phenomena in Primitive Irish, which had allophonic status until the loss of final syllables.

The mutations are triggered by the preceding words in lexical concatenations. Three types of mutations can be distinguished: lenition, nasalization (also: eclipse), aspiration (see Table 4.7). In this description, the mutational property of a form or category is indicated by superscript [L] for lenition, [N] for nasalization, and [H] for aspiration. Only lenition and nasalization find partial graphic expression in Old Irish, while aspiration remains entirely unexpressed in writing. It can only be inferred from Middle Irish orthographic practices and from Modern Irish grammar. Aspiration is also much more limited in effect than the other two mutations, in that it prefixes *h* to word-initial vowels after some forms of the article and – probably – after some inflectional endings, after the possessive *a*[H] 'her', after the prepositions *fri*[H] 'towards', *la*[H] 'with, by' and after the negative copula *ní*[H] 'it is not', e.g. *a ires* /a hirʲəs/ 'her belief', *fri Éirinn* /fri heːrʲənʲː/ 'towards Ireland', *ní é* /nʲiː heː/ 'it is not he'. It is unclear whether some formal categories that appear to have no mutational effect in Old Irish do in fact cause aspiration, e.g. the negative particle *ní* 'not', or vowel-final preverbs.

Lenition affects only consonants. For the relationship between, and the nature of, unlenited and lenited sounds see the section on the sound system above. Nasalization has effects on fewer consonants, but also on vowels. Nasalization of vowels is realized by prefixing *n-*. Nasalization of consonants is something of a synchronic misnomer, as only in the case of voiced stops a homorganic nasal is prefixed: *b > mb, d > nd, g > ŋg*. Voiceless stops and *f* are voiced: *p > b, t > d, c > g, f > β*. Liquids and nasals are not affected by

nasalization, but sometimes they are doubled in spelling in nasalizing contexts, just as in aspirating contexts. This doubling must not be misunderstood as phonemic gemination.

Table 4.7 Initial mutations in nouns (only such positions are indicated where phonetic and/or graphic variation between radical and mutated form occurs)

Radical	Lenited (a^L 'his')	Nasalized (a^N 'their')	Aspirated (a^H 'her')
‹p› /p/ *penn* 'pen'	‹ph› /f/ *a phenn*	‹p› /b/ *a penn*	
‹t› /t/ *tech* 'house'	‹th› /θ/ *a thech*	‹t› /d/ *a tech*	
‹c› /k/ *catt* 'cat'	‹ch› /x/ *a chatt*	‹c› /g/ *a catt*	
‹b› /b/ *bó* 'cow'	‹b› /β/ *a bó*	‹mb› /mb/ *a mbó*	
‹d› /d/ *dam* 'ox'	‹d› /ð/ *a dam*	‹nd› /nd/ *a ndam*	
‹g› /g/ *gell* 'pledge'	‹g› /ɣ/ *a gell*	‹ng› /ŋg/ *a ngell*	
‹f› /f/ *fer* 'man'	‹f ḟ Ø› Ø *a ḟer*	‹f› /β/ *a fer*	
‹s› /s/ *serc* 'love'	‹s ṡ› /h/ *a ṡerc*		
‹s› /s/ *siur* 'sister'	‹f ph› /f/ *a fiur, phiur*		
‹m› /m/ *macc* 'son'	‹m› /β̃/ *a macc*	‹m mm› /m/ *a (m)macc*	‹m mm› /m/ *a (m)macc*
‹n› /nː/ *nert* 'strength'	‹n› /n/ *a nert*	‹n nn› /nː/ *a (n)nert*	‹n nn› /nː/ *a (n)nert*
‹l› /lː/ *lebor* 'book'	‹l› /l/ *a lebor*	‹l ll› /lː/ *a (l)lebor*	‹l ll› /lː/ *a (l)lebor*
‹r› /rː/ *ríge* 'kingdom'	‹r› /r/ *a ríge*	‹r rr› /rː/ *a (r)ríge*	‹r rr› /rː/ *a (r)ríge*
vowel: *ubull* 'apple'		‹n-› /n/ *a n-ubull*	‹Ø› /h/ *a ubull*

Syncope

Another diachronic change that transformed into an important synchronic rule is that of syncope. Syncope as a historic process required that after the loss of inherited final syllables the vowel of every second, non-final syllable was deleted. The rule operated almost mechanically; syncope failed to apply only rarely, when the resulting cluster would have been too awkward to pronounce. In synchronic terms this means that when an extra syllable is added to a form (or when, in verbal morphology, a grammatical element is added at the beginning of or inside a form), a new syllable count has to be made for the new form and, if it is found to have three or more syllables, the vowels of all eligible syllables have to be elided, e.g. *dígal* 'revenge' + adjectival suffix *-ach* → *díglach* 'vengeful'.

The matter is complicated by several additional rules and by the fact that the rule applies to the diachronically underlying forms, not to synchronic surface representations. For example, the superlative (suffix *-em*) of *toísech* 'leading' is *toísechem*, seemingly with lack of syncope. But syncope has taken place regularly on the underlying form **towisechem* (loss of *i* with concomitant change of *w > j*), just as it has on **towisech*, the form underlying the adjectival base. Syncope often entails several other changes, the most important of which are palatalization and its counterpart depalatalization, diverse assimilation processes, and delenition. These sometimes conspire to create quite drastic allomorphy, especially among verbs. For example *im·soat* and *ní·impat* both reflect the same underlying form **ambi-sowat* 'they turn', but in the latter form the negative particle *ní* has been prefixed. This entails a change in the syncope pattern, as a result of which the underlying root **sow* remains without surface representation.

Syncope is an all-pervading phenomenon in the grammatical system of Old Irish,

operating in inflection and derivation alike. Throughout the history of the medieval Irish language, its rules were surprisingly faithfully adhered to, despite the extremely opaque allomorphy it produced. Syncope is a morphophonological process that marginally acquired morphological functions in its own right (e.g., Ó Crualaoich 1997). For example, different syncope patterns were generalized in Old Irish to create a morphological distinction between deponent (= middle) and passive verbal forms, a formal difference that cannot be reconstructed for the earlier stages of the language (McCone 1997: 74–81); in a small segment of noun inflection, syncope was suppressed to distinguish animate from inanimate *t*-stems (Stifter forthcoming).

Metaphony

Metaphony refers to changes of – predominantly stressed short – vowels. One of the fundamental aspects of Old Irish metaphony is the alternation of short *e* and *o* with *i* and *u* (raising) and, antithetically, of *i* and *u* with *e* and *o* (lowering). Such alternations are frequently concomitant to alternations in consonant quality, e.g. *fer* /fʲer/ 'man', but *fir* /fʲirʲ/ 'men'. Another frequent morphophonemic process is the insertion of *u* or *w* ('*u*-infection') after another short vowel, e.g. *biru* /bʲiru/ 'I carry', but *ní·biur* /bʲiwr/ 'I carry not'. Other metaphonic alternations are much more restricted, to the effect that sometimes they look like lexical properties. The triggers for these alternations are diverse morphological categories, which elude a simple, systematic description.

ORTHOGRAPHY

For writing Old Irish in manuscripts, the native, monumental Ogam script was not used, but the Latin alphabet was adapted (Ahlqvist 1994). The art of Latin writing was spread with the Christianization of Ireland in the fifth and sixth centuries (cf. Lapidge and Sharpe 1985, O'Sullivan 2005). Just how soon the Roman alphabet was adapted for writing continuous Irish texts on vellum, is in dispute: the sixth or seventh centuries have been suggested. By the ninth century Irish had ousted Latin as the chief medium of written communication in monastic schools (Byrne 1984: xix). All the primary sources for both Old and Middle Irish, and what we know of the origins of the secondary sources, point to the monasteries as the *loci scribendi* of the greater part – if not of all – of Early Irish writing. Old Irish is written in Insular minuscule, a script which combines features of Roman half-uncial and cursive. While most letters look familiar to modern eyes, the forms of *g*, *r*, *s* are Irish creations. The Tironian note 7 is employed for *ocus* 'and'. The full stop indicates the end of clauses and sentences.

The Latin alphabet, of which only the 18 letters *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, *i*, *l*, *m*, *n*, *o*, *p*, *r*, *s*, *t*, *u* were used by Irish scribes (*x* is a marginal variant of the trigraph *chs*), is especially unsuited for rendering the phonemic system of Old Irish with its more than sixty phonemes (including diphthongs). This means that each letter has to bear the functional load of expressing around four different phonemes. This is achieved by an elaborate system where the meaning of a letter is dependent on its position (initial, medial, final) within a word or phrase and where several letters have diacritic functions beside their phonemic value. In Old Irish, the letter *h* has only diacritic function, but at least by Middle Irish it came to express /h/, which had remained unexpressed before.

Nevertheless, OIr. orthography is far from forming a consistent system, numerous subareas of it remain ambiguous. This system of writing persisted into the twelfth century

when finally it was superseded by a system where stops were consistently denoted by a single letter or digraph, irrespective of the position. The rules for writing vowels, however, have remained until today.

Consonant signs

In absolute initial position, disregarding mutational effects within a phrase, all stops are unlenited and written with the expected letters:

penn /pʲenː/ 'pen'
tír /tʲiːr/ 'land'
coin /konʲ/ 'dogs'
bán /baːn/ 'white'
dér /dʲeːr/ 'tear'
gol /gol/ 'weeping'

A deviation from the standard Latin values is the deployment of *p*, *t*, *c* in final and intervocalic position for the voiced stops /b/, /d/, /g/, and of *b*, *d*, *g* and *m* for the voiced fricatives /β/, /ð/, /ɣ/, /β̃/. This peculiarity of Old Irish orthography is due to the pronunciation of British Latin to be presumed for early missionaries. The local British pronunciation of Latin will have reflected the process of British ('soft') lenition, which unlike Irish voiced the voiceless stops (while sharing the lenition of voiced stops into fricatives). As the Latin orthography was not accommodated to those sound changes, the Latin spelling taught to the Irish by British scholars will have remained conservative in form, while carrying the new sound values:

ap /ab/ 'abbot'
topur /tobur/ 'well'
bot /bod/ 'penis'
fotae /fode/ 'long'
óc /oːg/ 'young'
ocus /ogus/ 'and'
dub /duβ/ 'black'
lebor /lʲeβər/ 'book'
fid /fʲið/ 'wood'
fidach /fʲiðəx/ 'wooded'
mag /maɣ/ 'plain'
maige /maɣʲe/ 'plains'
lám /lʲaːβ̃/ 'hand'
domun /doβ̃un/ 'world'

The same convention applies word-initially to voiced consonants lenited in initial mutation:

in ben /in βʲen/ 'the woman'
a dán /a ðaːn/ 'his craft'
di gail /di ɣalʲ/ 'from valour'
mo maicc /mo β̃akʲ/ 'my sons'

And it applies word-initially to voiceless consonants nasalized in initial mutation:

co pecthaib /ko bʲekθəβʲ/ 'with sins'
in teinid /in dʲenʲəðʲ/ 'the fire (acc.)'
ar catt /ar gat/ 'our cat'

In internal and final position after *r*, *l* and *n* this convention does not always apply: *derc* can represent both /dʲerg/ 'red' and /dʲerk/ 'hole'; *altae* can be read as /alte/ '(s)he was reared' or as /alde/ 'they who rear'. One has to know what is meant. The lenited counterparts of /k/ and /t/ are expressed by means of the digraphs *ch* and *th*. The same practice is eventually extended to /p/:

oíph /ojf/ 'beauty'
sephainn / sʲefənʲ/ '(s)he played (an instrument)'
di phartaing /fartəŋʲgʲ/ '(made) out of red leather'
bith /bʲiθ/ 'world'
cathair /kaθərʲ/ 'city'
a thecosc /θʲegəsk/ 'his instruction'
tech /tʲex/ 'house'
fiche /fʲixʲe/ '20'
ón chridiu /xʲrʲiðʲu/ 'from the heart'

Unlenited voiceless stops, /p/, /t/, /k/, finally and medially can be indicated by doubling the consonant signs:

sopp /sop/ 'wisp'
bratt /brat/ 'cloak'
ette /etʲe/ 'wing'
ícc /iːk/ 'payment, cure'
peccad /pʲekəð/ 'sin'

But this is not consistently maintained, with *sop*, *brat*, *pecad* and *íc* also being permissible spellings. A consistent use of consonant gemination is found in the case of liquids and *n*. Here the double letter in medial and final position marks the unlenited sound, as in the following minimal pairs:

corr /korː/ 'heron'	vs.	*cor* /kor/ 'putting'
toll /tolː/ 'hole'	vs.	*tol* /tol/ 'desire'
caillech /kalʲːəx/ 'nun'	vs.	*cailech* /kalʲəx/ 'cock'
cenn /kʲenː/ 'head'	vs.	*cen* /kʲen/ 'without'

In the case of /m/ optional doubling may indicate non-lenition in final and internal position:

cam(m) /kam/ 'crooked'	vs.	only *om* /oβ̃/ 'raw'
cum(m)ae /kume/ 'shape'	vs.	only *cuma* /kuβ̃a/ 'sorrow'

In initial position, and in many consonantal groups, single *r*, *l*, *m* and *n* express the strong articulation, but inside phrases, after elements that do not cause lenition, geminated spelling may indicate non-lenition. Needless to say that the optionality of these orthographic rules

leaves much room for ambiguity, e.g. *a llebor* for /a lʲeβ̃ər/ 'her/their book', but *a lebor* for /a lʲeβ̃ər/ 'his book' and *a llebor* /a lʲeβ̃ər/ 'her/their book'. In Early Old Irish, *nd* and *mb* stand for /nd/ and /mb/ respectively, but during the Old Irish period they become monophonemic /nː/ and /mː/, a change which renders them freely interchangeable allographs of *nn* and *m(m)*.

Beginning in Late Old Irish, lenition of *f* and *s* is marked by a superposed punctum delens, *ḟ* = Ø and *ṡ* = /h/. Before that, lenition was not indicated orthographically. Occasionally a punctum stands over *ṁ* and *ṅ* when they are the product of the nasal mutation. In that way *iṅgen* /iŋʲgʲən/ 'nail' could be distinguished from *ingen* /inʲɣʲən/ 'daughter'.

Vowel signs

The letters *a, e, i, o, u* represent the vowels /a/, /e/, /i/, /o/, /u/. Vowel length is indicated, if at all, by the use of the acute accent, i.e. *á, é, í, ó, ú*. The diphthong /oj/ is written *óe* or *oí*, /aj/ is written *áe* or *aí*, /iə/ is expressed by *ía*, /uə/ by *úa*. This is an idealization; the length-mark may or may not be written on any element.

The greatest challenge in OIr. orthography is to give graphic expression to palatalization. This is achieved by a complex, but nevertheless deficient, system in which vowel signs are employed as diacritics to indicate the quality of the neighbouring consonants. The main pillars of this system are the support vowels *i*, which before a consonant usually indicates its palatalization (e.g. *beirid* /bʲerʲəðʲ/ '(s)he carries' or *gobainn* /goβənːʲ/ 'smiths'), and *a*, which after a consonant usually indicates its non-palatalization (e.g. *carmai* /karmi/ 'we love'). Closely connected with this is the spelling of schwa /ə/ that depends on the quality of the surrounding consonants. If both consonants are non-palatalized, *a* stands for schwa, e.g. *molad* /moləð/ 'praise'. If the first one is palatalized, but the second one not, *e* is used, e.g. *claideb* /klaðʲəβ/ 'sword'; in the reverse case *ai* or *i* is used, e.g. *canaid* or *canid* /kanəðʲ/ '(s)he sings'. If both consonants are palatalized, *i* is used, e.g. *claidib* /klaðʲəβʲ/ 'swords'. When next to a labial, schwa tends towards roundedness and can be written *o* or *u*. The letter *e* serves as a support vowel before word-final *a* and *o* after palatalized consonants, e.g. *doirsea* /dorʲsʲa/ 'doors', *toimseo* /toβ̃ʲsʲo/ 'measure (gen.)'. Notwithstanding the aporias already inherent in the system, these rules are rarely consistently applied.

NOMINAL MORPHOLOGY

The nominal class includes nouns, adjectives, and pronouns. Pronouns, special in many respects, will be treated separately. Old Irish has a definite, but no indefinite, article. Article, nouns and adjectives are inflected for gender, number and case. The three genders, masculine (m.), feminine (f.), neuter (n.), are grammatical, not natural. There are three numbers: singular (sg.), plural (pl.) and dual (du.), but adjectives have no special dual forms and use the plural instead. The dual is always accompanied by the numeral '2', i.e. m. *da*[L], f. *di*[L].

Five cases are formally distinguished: nominative (nom.), vocative (voc.), accusative (acc.), genitive (gen.), prepositional (prep.). The nominative denotes the subject (agent in active, patient in passive sentences), the predicate of the subject, and is used for topicalization. The vocative is the form of address and is always preceded by the particle *a*[L]. The accusative denotes the direct object and has – to a lesser degree – adverbial meanings (direction, temporal extension); to the latter belongs its use after certain prepositions. The genitive indicates various attributive, adnominal relations, including possession, and

it has qualificatory function. In all earlier grammars, the prepositional has been called dative. This is inappropriate because it lacks the prototypical datival function, i.e. it does not mark the indirect object. Its preponderant use is as complement after certain prepositions. Only in a few restricted contexts can it be used independently, i.e. without preposition: to denote the object of comparison after the comparative, and in petrified phrases with instrumental or comitative meaning. In poetry independent prepositionals occur more often, usually with instrumental or locative force.

It is not entirely appropriate to speak of case 'endings', but for want of a better expression (such as German *Ausgang*) the term will be retained here. Inflection is achieved by a complex interaction of morphophonemic processes of which the addition of overt endings is only one and perhaps not the most important aspect. Equally important, or more so, are the mutational effects that case forms exact on following words, and the patterns of alternations in the quality of final consonants. Metaphonic changes within inflected words are rather concomitant in nature.

The system tolerates a certain amount of homomorphy: there is a special ending for the vocative only in the singular of the masculine o- and i̯o-stems. Everywhere else, the vocative is identical in form to the nominative in the singular, and to the accusative in the plural. In feminine words, the accusative and prepositional singular are always identical (notwithstanding a difference in the mutational effects); in all neuters, nominatives and accusatives are always identical. In the dual there are only three sets of forms: nominative–vocative–accusative, genitive, prepositional. The prepositionals dual and plural are always identical, notwithstanding a difference in the mutational effects.

The basic form of the article is *in* (a^N for neuter nom./acc. sg.) with a variety of allomorphs that depend on the inflectional category and on the initial of the following word. The article is proclitic to its noun. It is not used in the vocative. It coalesces with primary prepositions, e.g. *fo* 'under' + acc. sg. $in^N \rightarrow fon^N$, *ar* 'in front' + prep. sg. $in(d)^L \rightarrow arin(d)^L$. Between non-leniting prepositions and the article *s* is inserted, e.g. fri^H + acc. pl. $inna^H \rightarrow frisna^H$, co^N + prep. sg. $in(d)^L \rightarrow cossin(d)^L$. The definite article may introduce a new topic that has not been mentioned before (Ronan 2004). The rule that in nominal phrases that consist of more than one noun only a single definite word – on the right hand side – may be present, is not as strictly followed in Old Irish as it is in the modern language (Ó Gealbháin 1991, Roma 2009).

Nominal stem-classes

Nouns are classified according to stem-classes. Their names are historical, conventionally taken from Indo-European; they do not describe synchronic stem formants. There is a rough formal dichotomy between vocalic (*o, ā, i̯o, i̯ā, ī, i, u*) and consonantal (dental: *t* and *d, nt*; guttural: *k, g, nk*; nasal: *n, men*; *r, s*) stem-classes. The stem-classes have certain predilections for gender: o-, i̯o-, and u-stems are masculine or neuter, ā-, i̯ā-, ī-stems are feminine, n-stems are masculine or feminine, men- and s-stems are neuter. All other classes can be any gender. The inflectional patterns of the stems are exemplified in the tables below.

Vocalic stems
The o-stems and to a lesser degree the ā-stems display many alternations especially in the quality of their root vowels. These alternations cannot be easily captured in synchronic rules and are not represented in the tables below. The examples in Table 4.8 are: *ech* m. 'horse', *scél* n. 'tale', *céile* m. 'client', *cride* n. 'heart', *guth* m. 'voice', *dorus* n. 'door', *súil* f. 'eye', *muir* n. 'sea', *túath* f. 'people', *guide* f. 'prayer', *inis* f. 'island', *méit* f. 'size'.

Table 4.8 Declension of nouns: the vocalic stem-classes

Class	o, **masc.**	o, **neut.**	i̯o, **masc.**	i̯o, **neut.**
sg.				
nom.	*ech*	*scél*^{N}	*céile*^{H}	*cride*^{N}
voc.	*eich*^{L}	*scél*^{N}	*céili*^{L}	*cride*^{N}
acc.	*ech*^{N}	*scél*^{N}	*céile*^{N}	*cride*^{N}
gen.	*eich*^{L}	*scéuil*^{L}	*céili*^{L}	*cridi*^{L}
prep.	*euch*^{L}	*scéul*^{L}	*céiliu*^{L}	*cridiu*^{L}
pl.				
nom.	*eich*^{L}	*scél*^{L}, *scéla*	*céili*^{L}	*cride*^{L}
voc.	*echu*^{H}	*scél*^{L}, *scéla*	*céiliu*^{H}	*cride*^{L}
acc.	*echu*^{H}	*scél*^{L}, *scéla*	*céiliu*^{H}	*cride*^{L}
gen.	*ech*^{N}	*scél*^{N}	*céile*^{N}	*cride*^{N}
prep.	*echaib*	*scélaib*	*céilib*	*cridib*
du.				
n. v. a.	*da*^{L} *ech*^{L}	*da*^{N} *scél*^{N}	*da*^{L} *chéile*^{L}	*da*^{N} *cride*^{N}
gen.	*da*^{L} *ech*^{L}	*da*^{N} *scél*^{N}	*da*^{L} *chéile*^{L}	*da*^{N} *cride*^{N}
prep.	*dib*^{N} *n-echaib*^{N}	*dib*^{N} *scélaib*^{N}	*dib*^{N} *céilib*^{N}	*dib*^{N} *cridib*^{N}

Class	u, **masc.**	u, **neut.**	i, **m./ f.**	i, **neut.**
sg.				
nom.	*guth*	*dorus*^{N}	*súil*$^{(L)}$	*muir*^{N}
voc.	*guth*	*dorus*^{N}	*súil*$^{(L)}$	*muir*^{N}
acc.	*guth*^{N}	*dorus*^{N}	*súil*^{N}	*muir*^{N}
gen.	*gotho/a*^{H}	*doirseo/a*^{H}	*súlo/a*^{H}	*moro/a*^{H}
prep.	*guth*^{L}	*dorus*^{L}	*súil*^{L}	*muir*^{L}
pl.				
nom.	*gothae/ai*^{H}	*dorus*^{N}, *doirsea*^{H}	*súili*^{H}	*muire*^{L}
voc.	*guthu*^{H}	*doirsea*^{H}	*súili*^{H}	*muire*^{L}
acc.	*guthu*^{H}	*dorus*^{N}, *doirsea*^{H}	*súili*^{H}	*muire*^{L}
gen.	*gothae*^{N}	*doirse*^{N}	*súile*^{N}	*muire*^{N}
prep.	*gothaib*	*doirsib*	*súilib*	*muirib*
du.				
n. v. a.	*da*^{L} *guth*^{L}	*da*^{N} *ndorus*^{N}	*di*^{L} *ṡúil*^{L}	*da*^{N} *muir*^{N}
gen.	*da*^{L} *gotho*^{L}	*da*^{N} *ndoirseo/a*^{N}	*da*^{L} *súlo/a*^{L}	*da*^{N} *moro/a*^{N}
prep.	*dib*^{N} *ngothaib*^{N}	*dib*^{N} *ndoirsib*^{N}	*dib*^{N} *súilib*^{N}	*dib*^{N} *muirib*^{N}

Class	ā, **fem.**	i̯ā, **fem.**	ī, **fem.**	ī (**short**), **fem.**
sg.				
nom.	*túath*^{L}	*guide*^{L}	*inis*^{L}	*méit*^{L}
voc.	*túath*^{L}	*guide*^{L}	*inis*^{L}	*méit*^{L}
acc.	*túaith*^{N}	*guidi*^{N}	*insi*^{N}	*méit*^{N}
gen.	*túaithe*^{H}	*guide*^{H}	*inse*^{H}	*méite*^{H}
prep.	*túaith*^{L}	*guidi*^{L}	*insi*^{L}	*méit*^{L}
pl.				
nom.	*túatha*^{H}	*guidi*^{H}	*insi*^{H}	*méiti*^{H}
voc.	*túatha*^{H}	*guidi*^{H}	*insi*^{H}	*méiti*^{H}
acc.	*túatha*^{H}	*guidi*^{H}	*insi*^{H}	*méiti*^{H}
gen.	*túath*^{N}	*guide*^{N}	*inse*^{N}	*méite*^{N}
prep.	*túathaib*	*guidib*	*insib*	*méitib*
du.				
n. v. a.	*di*^{L} *thúaith*^{L}	*di*^{L} *guidi*^{L}	*di*^{L} *inis*^{L}	*di*^{L} *méit*^{L}
gen.	*da*^{L} *thúaithe*^{L}	*da*^{L} *guide*^{L}	*da*^{L} *inse*^{L}	*da*^{L} *méite*^{L}
prep.	*dib*^{N} *túathaib*^{N}	*dib*^{N} *nguidib*^{N}	*dib*^{N} *n-insib*^{N}	*dib*^{N} *méitib*^{N}

Consonantal stems

The declension of consonant stems is by and large more uniform than that of the vocalic stem-classes. One common feature of almost all stem-classes is that the eponymous consonant is visible only in the oblique cases, and absent in the nominative singular. This rule does not apply to r-stems, which display the *r* everywhere, and to s-stems, where *s* is nowhere to be seen. The nominative singular may end in a vowel or a consonant. Feminine nouns lenite in the nominative singular, masculines don't. Some k-, t/d-, n- and men-stems distinguish two basic variants of the prepositional singular: a long form, identical to the accusative (the form in the tables below), and a short form, usually identical to the nominative. Since the availability of the short prepositional is almost a property of individual lexems, they are not indicated in the tables. Some n-stems further distinguish two allomorphs of the short variant, one that goes with the nominative, and another one in -*e*^{L}, e.g. *toimtiu* 'opinion' has *toimtin*, *toimtiu* and *toimte* side by side. The n-stems have been treated by Stüber (1998), some dental stems by Irslinger (2002). The examples in Table 4.9 are: *sail* f. 'willow', *rí* m. 'king', *fili* m. 'poet', *carae* m. 'friend', *dét* n. 'tooth', *brithem* m. 'judge', *ainm* n. 'name', *athair* m. 'father', *tech* n. 'house'.

Table 4.9 Declension of nouns: the consonantal stem-classes

Class	k, **m./f.**	g, **m./f.**	t/d, **m./f.**	nt, **m./f.**	nt, **neut.**
sg.					
nom./voc.	*sail*	*rí*	*fili*	*carae*	*dét*^{N}
acc.	*sailig*^{N}	*ríg*^{N}	*filid*^{N}	*carait*^{N}	*dét*^{N}
gen.	*sailech*	*ríg*	*filed*	*carat*	*dét*
prep.	*sailig*^{L}	*ríg*^{L}	*filid*^{L}	*carait*^{L}	*dét*^{L}
pl.					
nom.	*sailig*	*ríg*	*filid*	*carait*	*dét*^{L}
acc./voc.	*sailgea*^{H}	*ríga*^{H}	*fileda*^{H}	*cairtea*^{H}	*dét*^{L}
gen.	*sailech*^{N}	*ríg*^{N}	*filed*^{N}	*carat*^{N}	*dét*^{N}
prep.	*sailgib*	*rígaib*	*filedaib*	*cairtib*	*détaib*
du.					
n. v. a.	*di*^{L} *sailig*^{L}	*da*^{L} *ríg*^{L}	*da*^{L} *filid*^{L}	*da*^{L} *charait*^{L}	*da*^{N} *ndét*^{N}
gen.	*da*^{L} *sailech*^{L}	*da*^{L} *ríg*^{L}	*da*^{L} *filed*^{L}	*da*^{L} *charait*^{L}	*da*^{N} *ndét*^{N}
prep.	*dib*^{N} *sailgib*^{N}	*dib*^{N} *rígaib*^{N}	*dib*^{N} *filedaib*^{N}	*dib*^{N} *cairtib*^{N}	*dib*^{N} *ndétaib*^{N}

Class	n, **m./f.**	men, **neut.**	r, **m./f.**	s, **neut.**
sg.				
nom./voc.	*brithem*	*ainm*^{N}	*athair*	*tech*^{N}
acc.	*brithemain*^{N}	*ainm*^{N}	*athair*^{N}	*tech*^{N}
gen.	*britheman*	*anmae*^{H}	*athar*	*tige*^{H}
prep.	*brithemain*^{L}	*anmaim*^{L}	*athair*^{L}	*taig*^{L}
pl.				
nom.	*britheman*	*anman*^{L}, *anmanna*	*aithir*	*tige*^{L}
acc./voc.	*brithemna*^{H}	*anman*^{L}, *anmanna*	*aithrea*^{H}	*tige*^{L}
gen.	*britheman*^{N}	*anman*^{N}	*aithre*^{N}	*tige*^{N}
prep.	*brithemnaib*	*anmannaib*	*aithrib*	*tigib*
du.				
n. v. a.	*da*^{L} *brithemain*^{L}	*da n-ainm*^{N}	*da*^{L} *aithir*^{L}	*da*^{N} *tech*^{N}
gen.	*da*^{L} *britheman*^{L}		*da*^{L} *athar*^{L}	*da*^{N} *tige*^{N}
prep.	*dib*^{N} *mbrithemnaib*^{N}	*dib*^{N} *n-anmannaib*^{N}	*dib*^{N} *n-aithrib*^{N}	*dib*^{N} *tigib*^{N}

Arbor n. 'corn', gen.sg. *arbae*, prep. *arbaim* is special in that it drops the *r* of the nominative/accusative and inflects as an n-stem elsewhere. A handful of nouns cannot be included in one of the preceding classes. The two most important of these are *ben* f. 'woman' and *bó* f. 'cow', see Table 4.10.

Table 4.10 Declension of nouns: *ben* and *bó*

Class	ben, **fem.**	bó, **fem.**
sg.		
nom.	*ben*^{L}	*bó*^{L}
voc.	*ben*^{L}	*bó*^{L}
acc.	*mnaí*^{N} (old: *bein*^{N})	*boin*^{N}
gen.	*mná*^{H}	*bó*^{H}
prep.	*mnaí*^{L}	*boin*^{L}
pl.		
nom.	*mná*^{H}	*baí*^{H}
voc.	*mná*^{H}	*baí*^{H}
acc.	*mná*^{H}	*bú*^{H}
gen.	*ban*^{N}	*bó*^{N}
prep.	*mnáib*	*búaib*
du.		
n. v. a.	*di*^{L} *mnaí*^{L}	*di*^{L} *baí*^{L}
gen.	*da*^{L} *ban*^{L}	*da*^{L} *bó*^{L}
prep.	*dib*^{N} *mnáib*^{N}	*dib*^{N} *mbúaib*^{N}

Adjectives

Attributive adjectives follow their nouns. Only a few inflected adjectives that function as determiners precede the noun. If normal adjectives are moved before the noun, they lose inflection and are compounded with the noun; for some adjectives this is the only possible construction, e.g. *óen-* 'one', *sen-* 'old', *droch-* 'bad', *dag-*, *deg-* 'good', etc. Adjectives agree in gender, number (plural substitutes dual) and case with their head nouns. Almost all adjectives fall into one of four large groups that can be recognized by the final sound of the base form: o/ā-adjectives end in a non-palatalized consonant (e.g. *mór* 'big'), i̯o/i̯ā-adjectives in *-e* (*buide* 'yellow'), and i-stem adjectives in a palatalized consonant (*maith* 'good'). The slightly rarer u-stem adjectives have a *u* before their final consonant (*dub* 'black'). There are only residues of consonantal stems. In the first two groups, o- and i̯o-declension is used in conjunction with masculine or neuter nouns, and ā- or i̯ā-declension with feminines. The declension of adjectives parallels that of nouns, but already in our earliest sources a certain amount of convergence and reduction has set in, a tendency that continues into Middle Irish. There are fewer distinctive forms in plural and singular. While in the earliest period masculine o-stem adjectives inflect exactly like nouns,

the ending *-u* of the acc. pl. soon gives way to *-a*, the general nom./acc. pl. ending of feminines and neuters of that class, and eventually the nom. pl. follows suit. In the i̯o/i̯ā-, the i-, and the u-adjectives such unification is already in place: the nom./voc./acc. pl. of all genders is *-i*. In the singular of i-adjectives, apart from the mutational effects, inflection has virtually been given up. Only the feminine gen. sg. ends in *-e*. The singular of the u-adjectives is also moving towards this state. In the gen. sg. and in the feminine acc./prep. the endings of the o/ā-adjectives are used. Everywhere else the base form appears, while the mutational effects remain.

Fully inflected like nouns, and with the appropriate article added, substantivized adjectives can express various meanings ranging from abstract concepts to concrete objects. The main strategy of forming adverbs is to combine the article with the prepositional singular of the neuter substantivized adjective (*in maith* 'well'). This is later supplanted by a construction involving the preposition *co^H* 'until' (*co mmaith*).

Comparison of adjectives

Aside from the basic positive degree, there are three degrees of comparison that are formed by suffixation: the comparative ('more X than') with the suffix *-(i)u*, the equative ('as X as') in *-aithir*, and the superlative ('most X') in *-e/am*, e.g. *dían* 'swift' → *déinithir*, *déiniu*, *déinem*, or *ard* 'high' → *ardaithir*, *ardu*, *ardam*. All suffixes have a raising effect on the root vowel, where applicable. The basic concepts *accus* 'near', *becc* 'small', *il* 'many', *lethan* 'broad', *maith*, *dag-* 'good', *már*, *mór* 'great, much', *oac* 'young', *olc*, *droch-* 'bad', *remur* 'thick', *sír* 'long', *trén* 'strong' are irregular; they either lack one of the degrees of comparison or build them from reduced or suppletive bases. All three suffixal degrees of comparison are indeclinable and cannot be used attributively. They can only serve as the predicate of the copula. In order to make up for the lack of attributive constructions, relative clauses have to be used: *ingen álaind* 'a beautiful girl' → *ingen as áildem* 'the girl that is most beautiful'. The object of comparison after the equative is expressed by the accusative, after the comparative by the plain prepositional.

In addition to the suffixal formations, there are further degrees of comparison formed by prefixation: the excessive ('too X') with the prefix *ro-*, the elative or absolute superlative ('very X') with the suffixes *ér-*, *der-*, *rug-*, *ro-*, and, again, the equative with *com-*, in which case the object of comparison is introduced by the preposition *fri^H*.

NUMERALS

The fundamental overview of Old Irish numerals is Greene (1992). The cardinal *óen-* '1' is compounded with the counted noun; m.n. *da^L*, f. *di^L* '2', m. *tri^H*, n. *tre*, f. *téoir* '3', m.n. *cethair*, f. *cethéoir* '4' are fully inflected adjectives and agree in gender, number, and case with the nouns. *Cóic^L* '5', *sé^H* '6', *secht^N* '7', *ocht^N* '8', *noí^N* '9', *deich^N* '10' are uninflected. As determiners, the numerals stand before the counted nouns. The higher decades, hundreds and thousands are nouns and govern the gen. pl.: *fiche* '20', *trícha/o* '30', *cethorcha/o* '40', *coíca/o* '50', *sesca/o* '60', *sechtmoga/o* '70', *ochtmaga/o* '80', *nócha/o* '90' are masc. nt-stems; *cét* '100' is a neuter o-stem, *míle* '1000', a loan from Latin, a feminine i̯ā-stem. When the numerals are substantivized, a particle *a^H* precedes them; for '2' *dáu/dó* is then used. Combinations of digits and decades are formed by adding *deac* (later *déc*) '-teen' after the counted noun, e.g. *trí laích deac* '13 warriors', or the genitive of all higher decades, e.g. *noí n-aidchi fichet* '29 nights'. For '1' + decades, or for higher

numerals, the preposition *ar*[L] is used: *bó ar fichit* '21 cows', *coíca salm ar chét* '150 psalms'. For fractions, we find special words for *leth* (o, n) 'half' (often compounded), *trian* (o, n) 'third', *cethramthu* (n, f) 'quarter'. Other fractions make use of constructions with the ordinals.

The ordinals, except for *tánaise*, are ordinary adjectives, but they are preposed to their nouns: *cétnae* or *cét-* '1st', *tánaise* '2nd' and *aile* 'other', *triss*, *tress* '3rd', *cethramad* '4th', *cóiced* '5th', *seissed* '6th', *sechtmad* '7th', *ochtmad* '8th', *nómad* '9th', *dechmad* '10', *óenmad . . . deac* '11th', *fichetmad* '20th', *tríchatmad* '30th', *cétmad* '100th'.

For counting 'men', a special personal numeral series exists: *óenar* 'one man', *triar* 'three men', *cethrar* '4', *cóecar* '5', *sesser* '6', *mórfesser* '7', *ochtar* '8', *nóenbor* '9', *deichenbor* '10'. These words are compounded neuter o-stem abstracts with *fer* 'man' as second compound member, except for *dias* (ā, f) 'two men, a pair'. Later the use of the personal numerals is extended to other human beings. The numeral series for things is: *úathad* (o, n) 'single thing, singular number', *déde* 'two things', *tréde* '3', *cethardae* '4', *cóicde* '5', *séde* '6', *sechtae* '7', *ochtae* '8', *noíde* '9', *deichde* '10' (all: i̯o, n). Grammatically these numerals are treated as singulars, e.g. *gatais cethrar echu Pátraic* 'a four-men group stole (sg.) Pátric's horses'.

The inherited decimal system is well attested in computistical literature, which is based on Latin models. More at home in the native literature is the vigesimal system, the cornerstones of which are constructions such as *da fichit* '2 × 20 = 40', *trí fichit* '3 × 20 = 60'. A pronounced liking for multiples can be observed in other combinations: *dá secht* '2 × 7 = 14', *trí cóecait mac* '3 × 50 = 150 boys'.

PRONOUNS AND PRONOMINALS

Compared with its 'cousin' Indo-European languages, the pronominal system of Old Irish stands far apart. What must have been inherited has been widely reduced, in form and in categories. It is particularly striking how few stressed and/or inflected forms can be found. At the same time, the formal and categorial variation has been greatly expanded by the rise of new items, very often particles, with pronominal signification (see Schrijver 1997). Wide use is made of clitic or affixed elements that would be devoid of semantics if isolated from their context. In this overview not only will a distinction be made between pronouns and pronominals, but the former will also have to be subdivided according to their morphological and syntactical properties. Independent pronouns will have to be distinguished from dependent, clitic or affixed pronouns, and among the latter infixed and suffixed pronouns will have to be studied separately, not to mention their subdivisions, or the various clitic particles that defy a straightforward description. One common feature is that outside the 3 sg. the pronouns make no gender distinction. Relative pronouns are entirely absent: relativity in Old Irish is a verbal affair, not a pronominal one.

Independent personal pronouns

Independent personal pronouns (Table 4.11) have a very restricted role in the language. They are only used in a single construction, as predicates after the copula *is*, when the pronoun is topicalized: *is mé* or *is messe* 'it is I (who . . .)'. In this construction, they are incorporated in the predicate. Subject pronouns find no formal expression in Old Irish because they are inherent in the inflectional endings of verbal forms. Beside the simple independent pronouns a variant augmented by the *notae augentes* (see below) is found.

Sometimes these amplified forms are used for emphasis or contrast. Independent pronouns are felt to be singular substantives, e.g. *ní sní dud·rigni* 'it is (sg.) not we who has (sg.) done it'. Only in the 3 pl. is the verb also plural, e.g. *it hé cretite* 'it is (pl.) they who believe (pl.)'. Sometimes the 1 pl. and 2 pl. show *constructio ad sensum*, though, e.g. *it* (or *is*) *sib ata chomarpi* 'it is (sg. or pl.) you who are (pl.) heirs'. A neuter pronoun can refer to a phrase as a whole, e.g. *ra·fitir cretim do geintib* 'he knows it (neut.), the pagans believe' (no gender agreement of the proleptic pronoun with fem. *creitem* 'belief'). In predicative sentences, the gender of pronouns is attracted to what follows immediately, e.g. *is ed tobchétal nime in torainn* 'the thunders, it (neut. sg.) is the trumpet-song of heaven'; or *Críst didiu, is sí in chathir* 'Christ, then, she (!) is the city'.

Table 4.11 Independent personal pronouns

Person	Independent	Emphatic
1 sg.	*mé*	*messe*
2 sg.	*tú*	*tussu*
3 sg. m.	*(h)é*	*ésom*
3 sg. f.	*sí*	*sissi*
3 sg. n.	*(h)ed*	–
1 pl.	*sní*	*snisni, snini, sinni*
2 pl.	*sí*	*sissi, sibsi*
3 pl.	*(h)é*	*ésom*

Personal pronouns – general

Apart from the syntactically restricted forms mentioned in the previous paragraph, Old Irish does not have personal pronouns as a stressed class of words. Instead, for pronominal subjects the verbal endings alone suffice; where there is a two-part subject, one pronominal, the other non-pronominal, only the latter is explicitly mentioned, the other one implied by the plural ending, e.g. *con·ráncatar ocus Dubthach* 'they met (he) and D.' For pronominal objects uninflected clitic or fusional elements are used that need the support of another element, which is not necessarily stressed itself. These dependent pronouns developed from inherited, unstressed pronouns that coalesced with the preceding stress-bearing elements, sometimes amplified by further particles. In spite of their unitary origins, the personal pronouns display great allomorphic variation, which historically depended solely on the phonological context, but which has been realigned synchronically with other triggers. First of all, there is a dichotomy between infixed and suffixed pronouns. The four types of infixed pronouns occur only within the verbal complex, the two types of suffixed pronouns after simple verbs and as complements after primary prepositions (again with great allomorphic variation). With verbs, personal pronouns preponderantly mark the patient of a verbal action, but they can also carry the function of the indirect object ('dative'). Sometimes the pronominal affixes proleptically refer to overt nominal objects; this has been interpreted as object agreement marking by Eska (2009).

Infixed personal pronouns

Object pronouns that are governed by verbs are infixed inside the 'verbal complex', that is, they immediately follow the first element (preverb, grammatical particle, sentence particle, conjunction) of the verbal complex, preceding the stressed syllable.

The distribution of the four different types of infixed pronouns is governed by phonological, syntactical and lexical rules: class A infixes are used in main clauses after preverbs that historically ended in a vowel (*ar·*, *do·*, *fo·*, *imm·*, *ro·*), after the negative *ní·* and after the empty particle *no·*, which serves as a dummy support for pronouns in the case of simple verbs. Class B is used after preverbs that historically ended in a consonant (*ad·*, *as·*, *con·*, *etar·*, *fris·*, *for·*, *in·*). Class C is used in relative constructions, after certain conjunctions and after the interrogative particle *in·*. The fourth variant is used after the negative *ná·*, *nád·*, which is used in questions, in the imperative and in relative constructions.

Class A infixes are added after the supporting element. The 3rd sg. m. and n. pronoun -$a^{N/L}$ replaces -*o*, disappears after *ní* and appears as *e* or *a* after *ar·* and *imm·*. The mutational effects remain, e.g. *na·chain* '(s)he sings it', *fos·longam* 'we endure them'. Class B is characterized by /d/, written *d* or *t*, before the pronoun proper. When attached to consonants other than *r*, it merges with these, e.g. *atom·chiid* 'you see me', *forda·caun* 'I teach her'. Class C is characterized by /ð/ (delenited to /d/ after *n*), written *d*, before the pronoun, e.g. *nod·chain* 'who sings it', *arnda·fulsam* 'so that we may endure them', *indam·accaid* 'do you see me?'. The fourth variant resembles class C, but has *ch* instead of *d* before the pronoun proper, e.g. *nachin·ben* 'do not beat us', *connach·n-accam* 'so that we do not see him'. There is great variation in the spelling of the vowels; in Table 4.12 a wildcard vowel is used.

Table 4.12 Infixed pronouns

Person	A	B	C	nach-
1 sg.	-m^{L}	-d/tom^{L}	-dom^{L}	-$cham^{L}$
2 sg.	-t^{L}	-tot^{L}, -t^{L}	-dat^{L}	-$chat^{L}$
3 sg. m.	-a^{N}	-t^{N}, (-ta^{N})	-id^{N}, -did^{N}, -d^{N}	-ch^{N}
3 sg. f.	-$s^{(N)}$	-d/ta^{H}	-da^{H}	-cha^{H}
3 sg. n.	-a^{L}	-t^{L}	-id^{L}, -did^{L}, -d^{L}	-ch^{L}, -$chid^{L}$
1 pl.	-$n(n)$	-d/$ton(n)$	-$don(n)$	-$chan(n)$
2 pl.	-b	-d/tob	-dob	-$chib$
3 pl.	-$s^{(N)}$	-d/ta^{H}	-da^{H}	-cha^{H}

Suffixed personal pronouns

For suffixed pronouns after prepositions, see below. After 3 sg. and – to a lesser degree – 1 pl. and 3 pl. simple verbs, personal pronouns may be suffixed, that is, added after the ending (Breatnach 1977). The addition of the pronoun causes syncope, where applicable. Suffixed pronouns are particularly common after *táth** 'there is' (otherwise unattested as a simple verb), where the pronouns mark the indirect object instead of the usual direct object (Table 4.13).

Table 4.13 Suffixed pronouns

Person	Suffixed
1 sg.	*táthum*
2 sg.	*táthut*
3 sg. m.	*táthai*
3 sg. f.	*táthus*
3 sg. n.	*táthai*
1 pl	*táthunn*
2 pl.	*táthub*
3 pl.	*táthus*

After 1 pl. and 3 pl. verbs, the neuter suffixed pronoun is *-it*, e.g. *guidmit* 'we ask for it'.

Possessive pronouns

Attributive possessive pronouns (Table 4.14) precede, as uninflectable proclitics, the noun they qualify. They usually merge with preceding prepositions which thereby may undergo phonological changes, e.g. *diar* 'to our' < *do + ar*. The stressed forms, which occur in predicative position or are used as substantives, often have partitive force. The proleptic use of possessive pronouns is not uncommon, e.g. *a masse in choirp* 'the (lit. its) beauty of the body'.

Table 4.14 Possessive pronouns

Person	Possessive	Stressed
1 sg.	*mo*^{L}, *m'*	*muí, muisse*
2 sg.	*do*^{L}, *t'*	*taí*
3 sg. m.	*a*^{L}	*áe, aí*
3 sg. f.	*a*^{H}	*áe, aí*
3 sg. n.	*a*^{L}	*áe, aí*
1 pl.	*ar*^{N}	*náthar, nár*
2 pl.	*for*^{N}	*sethar, sár*
3 pl.	*a*^{N}	*áe, aí*

Notae augentes

Any of the before-mentioned pronouns, plus subjects encoded in verbal forms, can be optionally augmented by pronominal clitics, called *notae augentes* for want of a better term. These are added at the end of the accentual unit to which the pronouns belong. In previous grammars they have been described as emphatic or contrastive. However, it has been shown that they cannot have fulfilled these functions because their distribution follows a hierarchy of animacy, and does not comply with pragmatic necessities. They seem to function like personal pronouns in head marking languages, reinforcing an already present pronominal element (Griffith 2008a, 2008b). The addition of a *nota augens* does not cause syncope.

Table 4.15 Notae augentes

Person	*nota augens*
1 sg.	*-sa, -se*
2 sg.	*-su, -siu*
3 sg. m.	*-som, -sem, -sium*
3 sg. f.	*-si*
3 sg. n.	*-som, -sem, -sium*
1 pl.	*-ni*
2 pl.	*-si*
3 pl.	*-som, -sem, -sium*

Deictic and demonstrative pronouns

Formally similar elements serve as demonstrative and deictic markers. Sequences of article and noun can be augmented by enclitic adverbial particles of place that have demonstrative force, e.g. *in cú-so* 'this dog', *inna ingine-sin* 'of that girl', etc.

position	adverb
proximal	*-sa, -so*; *-se, sea-, -seo*
medial	*-sin* (usually anaphoric)
distal	*tall, ucut*

Emphasis is added by placing *í* before the particle. Deictic *í* turns an article into a substantive, e.g. *donaib í* 'to those', *ind í-siu* 'this one (fem.)', *a n-í-sin* 'that (aforementioned) thing'. *So* and *in so*, *se* and *in se*, *sin* and *in sin*, and *suide* (i̯o/i̯ā, neuter nom. acc. *sodain*) are also used substantively. The latter has anaphoric force and has an enclitic, unstressed variant *side*, neut. *són* and *ade*, *ón* with loss of *s*.

In principal, any adverb of place can be added after article + noun for local qualification. Among adverbs of place, Old Irish distinguishes morphologically between fixed position (e.g. *sund* 'here'), direction towards (*ille* 'hither'), and origin (*de-siu* 'from here'). Frequently, *t-* is prefixed to adverbial bases (e.g. *úas* 'above') to indicate where something is (*túas* 'above'), *s-* indicates the direction towards (*súas* 'upwards'), and *an-* the direction from where something is coming (*anúas*). Other bases that behave like this are: *ís* 'below', *air* 'in front, east', *íar* 'behind, west'. Bases with partly exceptional behaviour are *all* 'there, beyond', *dess* 'south', *túaid* 'north' and *echtair* 'outside'.

Interrogative and indefinite pronouns

The system of OIr. interrogative pronouns is curiously underdeveloped. At the heart of the system lies the stressed pronoun *cía* (general and masculine), feminine *cisí*^L, *cessi*^L, pl. *citné* 'who is?', neuter *cid*^L 'what is?', with its unstressed variant *ce*, *ci*, *cía*. Combined with substantives in the nominative, these pronouns correspond to adverbial interrogatives of other languages, e.g. *cía airm* 'what is the place → where?', *cía chruth* 'what is its manner → how?'. The simple unstressed variant is incorporated into the verbal complex and functions as the subject and object, even as adverbial object, and as indefinite 'whoever, whatever'. All other stressed interrogative forms or complexes are nominatives and

predicates of copular sentences. With verbs other than the copula, relative constructions must be used, e.g. *cía rannas dúib?* 'who is it who divides for you?'. Other interrogative pronouns occupy a marginal position: *coich* 'whose?', *cair* 'what for?', *can* 'whence?', *cote*, pl. *coteet*, *cateat* 'of what sort?', and the particle *co*[H] 'how? of what sort? where? wherein consists?', which is incorporated in the verbal complex.

Indefiniteness is also expressed by the preverbal particle *cecha·*, *cacha·* 'whosoever, whatsoever, all that', and by the predicative expression *sechi* 'whatsoever he, she, it is'.

Pronominals

Pronominals are determiners that have pronoun-like semantics. They vary in grammatical category and behaviour. Some are substantives, some adjectives; some are both but are reduced in shape when used adjectivally. Some adjectives follow their noun, others precede it. Although pronominals are largely inflected, a trend towards loss of inflection is observable.

innonn (*sinonn*): 'the same', used only predicatively without gender distinction. Postposed *cétnae* also means 'same'.

féin, *fadéin*, *céin*, *cadéin*: emphatic (not reflexive) '-self', follows its noun. It displays a great variety of uninflected forms that cannot be reproduced here. In the end, *féin* wins out.

aile: 'other', follows its noun. The neuter nom. acc. sg. is *aill*; its reduced form, invariant to gender and case, is *ala* e.g. in *indala* 'the one' (as opposed to 'the other').

alaile, *araile*: substantival form of *aile*, neuter nom. acc. sg. is *alaill*, *araill*. The plural *alaili* also means 'some, certain'.

nach: adjectival 'any', precedes its noun, strongly reduced in inflection. The neuter nom. acc. sg. is *na*[H].

nech: substantival 'someone, anyone; something, anything', in negative contexts 'nobody, nothing'. The neuter nom. acc. sg. is *ní*. The plural is supplied by *alaili*.

cach, *cech*: adjectival 'each, every', precedes its noun, strongly reduced in inflection.

cách: substantival 'everyone'; cf. also substantival, uninflectable *cechtar* 'each (of two)'.

Prepositions

Primary prepositions are autosemantic; they cannot be further analysed. OIr. prepositions govern the prepositional and/or the accusative cases. Almost every preposition has its particular mutational property; the distinction between leniting prepositions and all others is important in contexts where the prepositions merge with other elements (article, possessive pronouns, relative particle).

Prepositions governing the prepositional case: *a*[H] 'out of', *co*[N] 'with', *di*[L] 'of, from', *do*[L] 'to, for', *fiad*[L] 'in the presence of', *íar*[N] 'after', *ís* 'below', *ó*, *úa*[L] 'from', *oc* 'at', *ós* 'above', *re/ri*[N] 'before'.

Prepositions governing the accusative: *al*, *ol* (rare) 'beyond', *amal*[L] 'as, like', *cen*[L] 'without', *co*[H] 'to, till', *echtar* (rare) 'outside', *etar*[L] 'between', *fri*[H] 'towards, against', *imm*[L] 'around, about', *inge* (rare) 'except', *la*[H] 'with', *sech* 'past, beyond', *tar*, *dar* 'across', *tri*[L] 'through'.

Prepositions taking both cases, the prepositional indicating position, the accusative direction: *ar*[L] 'for, in front of', *fo*[L] 'under', *for* 'on, upon', *i*[N] 'in, into'.

In addition, Old Irish is rich in secondary prepositions, i.e. semantically extenuated collocations of primary prepositions and nouns (e.g. *ar bélaib* 'before the lips' → 'in

front of'), or petrified case forms of nouns (e.g. *dochum* 'towards', a reduced prep. sg. of *tochimm* 'the act of stepping'). Secondary prepositions govern the genitive, e.g. *dochum inna rígnae* 'towards the queen'; when combined with pronouns they take possessives instead of personal affixes, e.g. *a ndochum* 'towards them', *ardo bélaib* 'in front of you'.

Inflection of prepositions

It is a peculiarity of the Insular Celtic languages that the primary prepositions have merged in prehistoric times with unstressed pronouns, which in the process have become strongly reduced affixes. The resultant prepositional-pronominal complexes possess a fully developed, systematic inflection for number and person, and in the 3 sg. also for gender. They are usually called prepositional pronouns or, imprecisely, conjugated prepositions. Prepositions that govern both the accusative and the prepositional make that distinction in the inflected forms only in the 3rd persons. These complexes are only to some extent analysable as to their component parts; only a rough inventory of the 'endings' of these forms can be given (Table 4.16).

Table 4.16 Pronominal endings of prepositions

Person	Ending
1 sg.	-(*u*)*m*(*m*)
2 sg.	-(*u*)*t*
3 sg. m., n.	see below
3 sg. f.	-*e* (acc.), -*i* (prep.)
1 pl.	-(*u*)*n*(*n*)
2 pl.	-*ib*
3 pl.	-*u* (acc.), -*ib* (prep.)

No rules can be given for the 3 sg. masculine and neuter endings. These are lexemspecific. From a historical perspective, most of them continue fused masculine and neuter pronouns, but some are the mere prepositions, petrified in adverbial use. In the 3 sg. f. the consonant before the ending -*e* is devoiced or geminated, where possible, e.g. *for* 'on' → *forrae* 'upon her'. In the 3rd plural the consonant before the ending -*u* is devoiced or geminated, where possible, e.g. *imm* (< **imbi*) 'around' → *impu* 'around them'. Only a few model paradigms can be given here: *do* + prep. 'to, for', *la* + acc. 'with', *i* + prep./acc. 'in, into' (Table 4.17).

Table 4.17 Model inflected prepositions

Person	Singular	Plural
1st	*dom, dam*	*dún(n)*
2nd	*duit, dait*	*dúib*
3rd m./n.	*dó*	*doaib, dóib*
3rd f.	*dí*	

Person	Singular	Plural
1st	*lemm, liumm*	*linn, lenn*
2nd	*lat*	*lib*
3rd m./n.	*leis, lais*	*léu*
3rd f.	*lee*	

Person	Singular	Plural
1st	*indiumm*	*indiunn*
2nd	*indiut*	*indib*
3rd m./n. acc.	*ind*	*intiu*
prep.	*and*	*indib*
3rd f. acc.	*indi*	
prep.	*inte*	

Over the course of time pronominal prepositions suffered attrition; Old Irish is richer in them than the modern language is. The distinction between accusative and prepositional forms was abandoned.

VERBAL MORPHOLOGY

What is best called the 'verbal complex' (see McCone 1997: 1–19) is the most difficult and most challenging section of Old Irish grammar. Verbal morphology is only one aspect of this. The verbal complex is everything that falls in the accentual domain of the verb. This includes not only the inflected verbs, but also any preverbs, so-called conjunct particles, i.e. sentence-modifying elements, conjunctions, as well as various grammatical and pronominal prefixes, infixes, and suffixes. The notorious complexities besetting the Old Irish verb, however, derive not so much from the many component parts of the verbal complex, but are rather due to the intricate morphology and its bewildering wealth of forms, a wealth that seems to border on the absence of rules. Some of the apparent irregularities become transparent only diachronically. It is one of the most outstanding features of Old Irish that it preserves distinctions and categories that made sense several thousand years in the past, but which can only be regarded as opaque alternations in synchronic terms (e.g. the future *ebraid* of the verb *ernaid* 'to bestow', which was regular as long as PIE *p was present in the language). Still, the number of changes and restructurings that have taken place in the verbal system should not be underestimated. One must not mistake Old Irish verbs for a quarry of Proto-Indo-European morphology. The system is characterized by just as much innovation as conservation. The Old Irish verbal system is strongly non-Indo-European in appearance, but it is transparently Indo-European in origin.

The complexities of the verbal system are also the result of a proliferation of morphological alternants and categories that are synchronically devoid of function or semantic information. Unlike the nominal system, where there is an incipient tendency towards analytic constructions, especially in adverbial expressions, the verbal system is decidedly synthetic. Old Irish is a pro-drop language: the subject is expressed by the verbal endings alone and never by independent subject pronouns. Pronominal objects are also

marked within the verbal complex; Eska (2009) therefore characterized the Old Irish verb as 'polypersonal'.

Verbs display a striking propensity towards compounding with up to four preverbs before the root. The expanding use of preverbs can be exemplified by 1 sg. *fo·timmdiriut*, composed of *fo* 'under', *to* 'to', *imb* 'around', *di* 'from', and the root *reth-* 'to run', which translates Latin *suffio* 'I fumigate'. Semantic information being thus shifted from the roots towards the preverbs, the role of the roots has been enervated in consequence. This is on the one hand reflected in the fact that in many synchronic stem allomorphs the roots are no longer visible or are heavily truncated. On the other hand, a diachronic result of this is the reduction of the number of inherited roots (Wodtko 2007) and the high proportion of compound verbs in relation to simple verbs. Suppletion, i.e. the existence within a paradigm of two or more different lexical roots, is not as pronounced in Old Irish as one would be inclined to believe after having been first exposed to its verbal system (Veselinović 2003). The citation form of Old Irish verbs is the 3 sg. present indicative. When in the following the citation form of a verb is meant it will be translated with the English infinitive. When the 3 sg. present is meant, the English s-form will be used. The formal inventory of the Old Irish verbal system is too rich to give a comprehensive description here. Instead it will be attempted to outline the fundaments.

The verbal categories

The Old Irish finite verb is multi-dimensional, i.e. it encodes many different grammatical dimensions (see Table 4.18). The distribution of formal markers and the structure of categorial information, however, are very unevenly balanced. For example, the modal category subjunctive is expressed by a separate stem to which the default endings are added, whereas the modal category imperative consists of separate endings added to the default stem variant. In the preterite, some formations have a separate preterital ending set, and others use the primary endings, but whereas everywhere else in the system primary endings are contrasted with secondary endings, this is not so in the preterite. Or, to cite a last example, whereas in all other classes the passive voice is marked by separate endings, in the preterite a combination of a special stem and special endings serves the same end.

The semantic or content dimensions of Old Irish finite verbs are 'person and number', 'tense and aspect', 'mood', 'voice', 'relativity', and 'perspectivity'. Strictly speaking, 'object pronominality' could also be included as a dimension of its own, since object personal pronouns can only be encoded as infixes or suffixes on the verb. For practical reasons, however, they have been discussed in the section on pronouns. In addition, finite verbs also encode the purely morphological dimensions 'deponentiality' and 'dependency', both of which possess no semantic content and which, being redundant, were eliminated in the course of Irish-language history. Perspectivity and object pronominality are optional dimensions, that is, marking the verbs in these dimensions imparts additional information to an already complete verbal form. All other dimensions are obligatory: a full verbal form inherently carries relevant information concerning those dimensions, even if occasionally one or more of those categorial oppositions may be neutralized.

Person and number: This is a fusional, i.e. non-agglutinative category, the two dimensions of which cannot be formally separated. This dimension is given morphological expression by the personal endings. All finite verbs are obligatorily marked for subject person and number. The three persons '1st – speaker', '2nd – addressee' and '3rd – person, object, matter', and the two numbers 'singular' and 'plural' are indicated. Dual subjects take plural verbs. As for concord in number, the verb typically agrees with

the grammatical number, although *constructiones ad sensum* are possible. There is no unmarked member in this dimension, although there is a very slight tendency for singular persons to lack formal marking. Verbs are indifferent as to gender, e.g. *caraid* is 'he/she/ it loves'. The gender distinction in the 3 sg. can only be conveyed by the optional use of *notae augentes*: masculine *caraid-sem* 'he loves' and feminine *caraid-si* 'she loves'.

Mood: Old Irish distinguishes the two universal modalities 'realis' and 'irrealis'. The realis indicates that something belongs to the known, experienced world (or that the speaker believes so), the irrealis speaks of imagined, desired worlds. The realis is grammatically represented by the 'indicative' mood. It is the unmarked category of this dimension and it is further split into the three tenses past, present and future (see further under *tense and aspect*). The irrealis is represented by the moods 'imperative', 'conditional', and 'subjunctive' (McQuillan 2002: 246). The imperative is the mood for immediate orders. Morphologically it stands apart in the verbal system (reminiscent of the vocative in the nominal system, to which it is conceptually related) because it is indifferent to the dimensions relativity, perspectivity and dependency. The conditional refers to a hypothetical event that is or was contingent on another set of circumstances. In this sense it expresses potentiality and irreality. The conditional vacillates around the margins of mood and tense and aspect in that it also supplies a future for a past frame of reference. The subjunctive characterizes a verbal action as to some degree removed from factuality; therefore its semantic range goes from the expression of wishes over uncertainty to irreality. There are two formal categories of subjunctive, the 'present subjunctive' and the 'past subjunctive'. The former fulfils the functions of the subjunctive in a present or future frame of reference, the latter in a past frame of reference. By necessity, the latter is further removed from reality. In complement clauses that depend on verbs of saying, commanding or thinking, the modal meaning of the subjunctive has receded in favour of being a mere marker of subordination.

Tense and aspect: This category ultimately comprises two different dimensions, which for practical reasons cannot be separated. Old Irish distinguishes the three tenses 'present', 'past' and 'future'. The present is encoded by the morphological category 'indicative present', which additionally can give expression to events without time reference ('generic action') and to past events ('historical present'). Future events must be encoded by the morphological category 'future'. By necessity, the future touches on the irrealis mood. In the past, an aspectual distinction is made between a perfective 'preterite' and an imperfective 'imperfect'. The preterite denotes actions that were completed in the past; it is frequently used for narrative purposes. The imperfect encodes repeated or customary action in the past. Strictly speaking, there is no unmarked member in this category. However, there is a tendency during the later Old and Middle Irish periods for the underlying stem of the present tense to become the default stem and to provide the derivational basis for all other stems.

Voice (or diathesis): This is a binary dimension, comprising the two categories 'active' and 'passive'. The active voice is the semantically unmarked member of the opposition and finds two formal expressions, the so-called 'active endings' and the 'deponent endings' (see *deponentiality* below). There are special active endings for all persons and numbers. The passive voice is marked with special endings only on 3rd persons. The 3 sg. passive functions also as an impersonal form and as such supplies the passive voice for the 1st and 2nd persons in constructions with infixed object pronouns. Every Old Irish verb, even intransitives, can be passivized, if only to create an impersonal form. It is possible but not obligatory to mention the agent of a passivized transitive verb in prepositional phrases.

Relativity: Old Irish finite verbs can take on the two states 'non-relative' and 'relative'. Non-relative is the unmarked member of the binary opposition. Relative means that

the clause which is headed by the relative verb stands in a subordinate relationship of some sort to another clause. Relativity is marked by an intricate system of morphological, morphophonological and pronominal means. The imperative does not participate in this opposition in that it is non-relative per default.

Perspectivity: All finite verbs except for imperatives can be 'augmented' to change the perspective by which speaker and audience look at a verbal action. In effect, however, perspective augmentation is very rare in the future and conditional. In particular augmentation means that a perfective (resultative) or potential meaning is added to the plain verbal action, e.g. *as·beir* '(s)he says' vs. augmented *as·robair* '(s)he can say', or *as·bert* '(s)he said' vs. *as·rubart* '(s)he has said'. Typically a grammatical element, usually the preverb *ro*, is pre- or infixed to a given verbal form, but other preverbs or different strategies (stem suppletion) are also possible, e.g. *lod* 'I went' vs. *do·cuad* 'I have gone'.

Deponentiality: Every Old Irish verb belongs to one of two categories of a binary opposition, one characterized by 'active endings', the other by 'deponent endings'. While for the first type of verbs there is no adequate name, those of the second type are called 'deponents'. Non-deponent verbs are the unmarked members of the opposition. The term 'active endings' must not be mistaken with the active voice. Both active and deponent endings are active in voice, the difference being of an entirely formal, redundant nature. Deponent endings typically resemble their active counterparts with an additional *r* at the end, e.g. non-dep. *car-ait* 'they love' vs. dep. *mol-aitir* 'they praise', or *gád-Ø* 'I prayed' vs. *gén-ar* 'I was born'. A few verbs are 'semi-deponents', that is, some of their stems go with active endings, others with deponent endings. The active endings are the unmarked members of the opposition. In all categories that use secondary endings the opposition in deponentiality is neutralized. Already at the beginning of the Old Irish period the decline of the deponents as a class has set in and verbs that originally must have been deponent have adopted active endings. This dimension is eventually eliminated from the language. Diachronically deponents continue verbs with middle inflection. But whereas in Indo-European the middle voice indicated some sort of self-centred verbal action and thus contrasted functionally with the active, in Irish this has become a non-functional, merely lexical property that has to be known for each verb separately.

Dependency: The last grammatical dimension of the Old Irish verb is also of a purely formal, non-functional nature, and it is again binary. All verbal forms except for imperatives, which behave wholly idiosyncratically in this regard, are either 'independent' or 'dependent'. The conditioning factor is the absence or presence of clause-initial so-called conjunct particles: the various negative particles, alone or in combination, the interrogative particles, certain interrogative pronouns, prepositional relatives, and certain conjunctions. A verbal form preceded by one of those elements is dependent. The independent forms are the unmarked members of the opposition. How the distinction between independent or dependent is realized will be described in a separate paragraph below.

Table 4.18 The dimensions and categories of the Old Irish verb

Modality	Mood	Tense/asp.	Grammatical category	vc.	dpn.	psp.	rel.	dpd.
realis	indicative	present	present indicative	±	±	±	±	±
		past pf.	preterite	±	±	±	±	±
		past ipf.	imperfect	±	Ø	±	±	±
		future	future	±	±	(+) –	±	±
irrealis	conditional	Ø	conditional	±	Ø	(+) –	±	±
	subjunctive	present	present subjunctive	±	±	±	±	±
		past	past subjunctive	±	Ø	±	±	±
	imperative	Ø	imperative	±	±	–	–	Ø

Key: 'grammatical category' lists the traditional names of the categories; pf. = perfective aspect, ipf. = imperfective aspect, vc. = voice, dpn. = deponentiality, psp. = perspectivity, rel. = relativity; dpd. = dependency; ± = the grammatical category can appear in both states of the binary dimension; – = the grammatical category can only appear in the unmarked member of the dimension; Ø = the grammatical category is indifferent to this dimension.

Stems and endings

Most, but not all, of these categories are expressed by combinations of the two fundamental formative elements stem and ending. There are five stems for finite verb forms: present stem, subjunctive stem, future stem, preterite stem, preterite passive stem. All of these have a large variety of morphologically very divergent sub-classes, which will be discussed in separate paragraphs. The stem of the non-finite past participle and verbal of necessity is almost always derivable from the preterite passive stem and is here not counted as separate. A sixth stem underlies the non-finite verbal noun. There are six groups of ending sets: a morphologically divergent group of primary ending sets, and the rather unitary sets of secondary endings, suffixless-preterital endings, mixed preterital endings, imperative endings, and passive preterite endings. The stems and endings are not arbitrarily combinable. There are numerous restrictions on which stems can go with which endings. They combine in roughly the following way (Table 4.19) to give the basic tense and mood system of Old Irish.

Table 4.19 Combinations of stems and endings

	primary	suff. /mixed pret.	secondary	imperative	pret. pass.
pres. stem	pres. ind.		imperfect	imperative	
subj. stem	pres. subj.		past subj.		
fut. stem	future		conditional		
pret. stem	preterite	preterite			
pret. pass.					pret. pass.

Dependent and independent verbal forms

There are two entirely different ways of expressing the grammatical dimension of dependency. The choice of the method depends on yet another formal criterion, namely whether a verb is simple or compounded. Simple verbs consist of a verbal root or stem plus ending, e.g. *gairit* 'they shout' (*gar-* + *-it*), whereas in compound verbs the verbal root or stem is preceded by one or more lexical preverbs, e.g. *do·acrat* 'they plead' (*to-ad-* + *gar-* + *-et*). In verbal categories that take primary endings, simple verbs at the head of their clause appear in the so-called absolute form in independent position, carrying absolute endings, e.g. *canaid* '(s)he sings', but they appear in the so-called conjunct form in dependent position, carrying conjunct endings (indicated by italics in the diagram below), e.g. *in·cain* 'does (s)he sing?'. Compound verbs appear in the so-called deuterotonic form in independent position, and in the so-called prototonic form in dependent position, both of which carry exclusively conjunct endings:

	independent position	dependent position
simple verbs	absolute	*conjunct*
compound verbs	deuterotonic	prototonic

Among the features which contribute most richly to the proliferation of forms in the verbal system of Old Irish is the system of double inflection that results from the distinction between absolute and conjunct endings in the primary endings and in the passive preterite. This morphologically redundant system is probably an inheritance from the Insular Celtic period (whether this be conceived of as a genetic node or as a period of interaction between the languages in Britain and Ireland). Old and Middle British languages retain a few traces of a similar system, but nowhere is it so fully alive as in Old Irish. The origins of the system are disputed, but it is largely uncontested that it is somehow connected with the rise of the verb-initial word order in the Insular Celtic languages (see the contributions in Karl and Stifter 2007: 301–402, McCone 2006). Consequently, no trace of a comparable system has so far been found in the Continental Celtic languages, which are not verb-initial. In categories that use secondary endings (imperfect, past subjunctive, conditional) the opposition between absolute and conjunct inflection is neutralized in favour of conjunct forms by the rule that all independent simple verbs are compounded with the semantically empty preverbal particle *no·*. In the active voice of suffixless-preterital endings and in parts of the mixed preterial endings there is no formal distinction between absolute and conjunct inflection, but the opposition between dependent and independent forms is not neutralized.

For compound verbs, which have no absolute-conjunct distinction in the endings, an even more complicated system of syntactically governed accent shifts has been devised. In independent position, compound verbs are stressed on their second element, that is, after their first preverb (in this respect, simple verbs augmented by the grammatical particle *ro* also count as compound verbs), e.g. *fo·loing* /foˈloŋʲgʲ/ '(s)he suffers'. Therefore, these forms are called 'deuterotonic' (Greek *deuteros* 'second', *tonos* 'accent'). This is the citation form. If any conjunct particle comes to stand before the verbal form, the stress shifts one position to the left onto the first preverb, e.g. *ní·fulaing* /nʲiːˈfulaŋʲgʲ/ '(s)he does not suffer'. Therefore, these forms are called 'prototonic' (Greek *protos* 'first', *tonos* 'accent'). The verbal complex as such, which encompasses everything that falls in the accentual domain of the verb, is still stressed on the second element. The shifting accentuation leads to quite remarkable variations in the surface representations of the verbs. It is

here that the complex synchronic morphophonemic alternations come into play that were discussed in the section on OIr. phonology. In particular, divergent patterns of metaphony and of syncope with its concomitant changes of assimilations, etc., changes that all apply to the underlying forms, lead to heavy morphological alternations in the surface verbal system, e.g. *do·beram* vs. *ní·taibrem* 'we (don't) bring/give' < *to-ber-am*, *con·ístais* vs. *ní·cóemsaitis* 'they would (not) have been able' < *cum-īs-atis*, or *as·robrat* vs. *ní·érbarat* 'they may (not) say' < *eks-ro-ber-at*.

The ending sets

All of the previously mentioned ending sets consist of endings for active and passive voice (only 3 sg. and 3 pl. in the latter); all except for the secondary endings include non-deponent ('active') and deponent ending series; and all except for secondary and imperative endings have special relative endings for the 3 sg., 1 pl. and 3 pl. persons. In addition to this, in the primary and the mixed-preterital ending sets there is a distinction between absolute and conjunct endings, but only with simple verbs. All other verbal forms know only a conjunct ending series. The absolute 2 pl. is very often missing from attested paradigms. Without doubt this is due to pragmatic reasons and does not reflect a structural gap. Therefore, the maximum Old Irish verbal paradigm can be represented by the template in Table 4.20.

Table 4.20 The maximum OIr. verbal paradigm

pers.	add. cat.	abs.	conj.
1 sg.		+	+
2 sg.		+	+
3 sg.		+	+
	rel.	+	−
	pass.	+	+
	pass. rel.	+	−
1 pl.		+	+
	rel.	+	−
2 pl.		(+)	+
3 pl.		+	+
	rel.	+	−
	pass.	+	+
	pass. rel.	+	−

Primary endings
'Primary endings' is a cover-term for a quite diverse range of inflectional series. For practical reasons, it will be useful to group them in several classes with some internal variation. Although the passive endings are part of the primary ending sets, they are rather unitary across the board and have therefore been taken out of the paradigms, to be discussed separately. It should be noted that due to the quirks of Old Irish orthography there is much more spelling variation in the endings than can be indicated in these tables. In particular, the spellings of the vowels in the tables reflect those of the central examples of each class, e.g. those of the present I-class typically appear after non-palatalized

consonants. There is, however, always the possibility that the endings appear after a consonant of the opposite quality. The spellings of the vowels then change accordingly. This is only specifically indicated for the s-preterite endings where there is a fundamental distinction between non-palatalized endings with W1-verbs and palatalized ones with W2-verbs. But in principle, the same variation can apply everywhere. Furthermore, with endings of the shape -CV there is usually also a variant with a vowel before the consonant. The distribution of the allomorphs depends on the syncope pattern.

The first group is that which comprises the present ending classes Ia and Ib and the so-called a-ending set (Table 4.21). While the latter and the first two are not specifically related, they are similar enough to group them together. Blank slots in the tables mean that the forms are exactly like the corresponding ones in the left-most class. The ending -*ub* of the 1 sg a-ending set is exclusive to the f-future.

Table 4.21 Primary endings – present I and a-endings

| | Present Ia | | Present Ib | | a-endings | |
	abs.	conj.	abs.	conj.	abs.	conj.
1 sg.	-*aim(m)*	-*aim(m)*			-*a*	-Ø; -*ub*
2 sg.	-*ai*	-*ai*			-*ae*	-*ae*
3 sg.	-*aid*	-*a*		-Ø		
rel.	-*as*	–				
1 pl.	-*mai*	-*am*				
rel.	-*mae*	–				
2 pl.	-*thae*	-*aid*				
3 pl.	-*ait*	-*at*				
rel.	-*tae*, -*aite*	–	-*tae*			

The ending classes present IIa and IIb and i-future are closely related. Present class III stands apart (see Table 4.22). It shares much more with the s-ending set than with the other present ending classes. The notation '^{j}-Ø' means that the form ends in the palatalized stem-final consonant; 'u-inf.' means that an *u* is inserted before the stem-final consonant; 'raising' means that the vowel before the stem-final consonant is raised, if possible. Raising is a concomitant feature in many ending categories, but only here is it of disambiguating importance.

Table 4.22 Primary endings – presents II and III

	Present IIa		Present IIb		i-future		Present III	
	abs.	conj.	abs.	conj.	abs.	conj.	abs.	conj.
1 sg.	*-iu, -im(m)*	*-iu, -im(m)*			*-iu*	*-iu*	*-u*	*-Ø* (+ *u*-inf.)
2 sg.	*-i*	*-i*			*-e*	*-e*	*-i*	ʲ*-Ø* (+ raising)
3 sg.	*-id*	*-i*		ʲ*-Ø*			*-id*	ʲ*-Ø*
rel.	*-es*	–					*-as*	–
1 pl.	*-mi*	*-em*					*-mai*	*-am*
rel.	*-me*	–					*-mae*	–
2 pl.	*-the*	*-id*					*-the*	*-id*
3 pl.	*-it*	*-et*					*-ait*	*-at*
rel.	*-te, -ite*	–	*-te*				*-tae*	–

The three sub-types of the s-ending class (s-preterite, s-subjunctive, s-future) are much more uniform than Table 4.23 would suggest. The *s* is that of the stem. The main difference, the presence (or not) of a vowel between the *s* and the ending, is just an automatic consequence of divergent syncope patterns, just like the difference in palatization of the *s*.

Table 4.23 Primary endings – the s-endings

	s-preterite (s I)		s-subjunctive (s II)		s-future (s III)	
	abs.	conj.	abs.	conj.	abs.	conj.
1 sg.	*-s(i)u*	*-us*	*-su*	*-s, -us*	*-sea*	*-us*
2 sg.	*-s(a)i*	*-sʲ*	*-si*		*-si*	
3 sg.	*-sʲ*	*-Ø*				
rel.	*-as, -es*	–	*-s*		*-es*	
1 pl.	*-s(a)immi*	*-sam, -sem*	*-smai*	*-sam*	*-simmi*	*-sem*
rel.	*-s(a)imme*	–	*-smae*		*-simme*	
2 pl.	?	*-s(a)id*	*-ste*	*-sid*	*-ste*	*-sid*
3 pl.	*-s(a)it*	*-sat, -set*	*-sait*	*-sat*	*-sit*	*-set*
rel.	*-s(a)ite*	–	*-stae*			

The primary deponent endings (Table 4.24) are fairly uniform (provision being made for the variation after non-palatalized and palatalized stem-final consonants). The present subset and the subset corresponding to the a-ending set differ only in the 1 sg. The s-deponent ending set stands further apart.

Table 4.24 Primary endings – deponent endings

	Present deponent endings		a-deponent endings		s-deponent endings	
	abs.	**conj.**		**abs.**	**conj.**	
1 sg.	*-ur*	*-ur*	abs. & conj.: *-ar, -er*	?	*-s(i)ur*	
2 sg.	*-ther*	*-ther*		?	*-ser*	
3 sg.	*-ithir, -idir*	*-athar, -adar, -ethar, -edar*		*-stair, -stir*	*-star*	
rel.	*-athar, -adar, -ethar, -edar*	–		?	–	
1 pl.	*-(m)mir*	*-a(m)mar, -(m)mer*		*-sammar*	*-sammar, -semmar*	
rel.	*-mmar, -mmer*	–		?	–	
2 pl.	*-the*	*-id*		?	*-sid*	
3 pl.	*-itir*	*-atar, -etar*		*-sitir*	*-satar, -setar*	
rel.	*-atar, -etar*	–		?	–	

There are three sub-types of primary passive endings for the present, subjunctive and future (Table 4.25). Those formations that have the primary s-preterite endings in the active voice build their passive on a different stem and with different endings (see below).

Table 4.25 Primary endings – passive endings

	Passive I		Passive II		Passive III	
	abs.	**conj.**	**abs.**	**conj.**	**abs.**	**conj.**
3 sg pass.	*-thair*	*-thar*	*-air*	*-ar*	*-estir*	*-estar*
pass. rel.	*-thar*	–	*-ar*		*-estar*	–
3 pl pass.	*-tair, -aitir*	*-tar, -atar*			*-sitir*	*-setar*
pass. rel.	*-tar, -atar*	–			*-setar*	–

Secondary endings
The secondary endings are very regular. Their origins are one of the bigger mysteries of Irish historical linguistics. The same caveats as before apply to the spelling of the vowels and to possible vowels before endings of the shape -CV (Table 4.26).

Table 4.26 Secondary endings

	Secondary endings (conj.)
1 sg.	*-(a)inn*
2 sg.	*-th(e)a*
3 sg.	*-ad, -ed*
pass.	*-th(a)e*
1 pl.	*-m(a)is*
2 pl.	*-th(a)e*
3 pl.	*-t(a)is*
pass.	*-t(a)is*

Suffixless-preterital endings

In the so-called suffixless-preterital endings no distinction is made between absolute and conjunct endings in the singular. In the plural a few absolute forms are attested, but it is not clear whether they are old or innovatory. The addition of the deponential endings *-ar* and *-air* does not cause syncope of the preceding verbal form (Table 4.27).

Table 4.27 Suffixless-preterital endings

	Suffixless-preterite		Deponent	
	abs.	conj.	abs.	conj.
1 sg.	*-Ø*		*-ar*	
2 sg.	*-Ø*		*-ar*	
3 sg.	ⁱ*-Ø*		*-air*	
rel.	*-e*	–	?	–
1 pl.	*-(am)mar, -mir?*	*-(am)mar*	*-(am)mar, -mir?*	*-(am)mar*
rel.	?	–	?	–
2 pl.	*-id*		*-id*	
3 pl.	*-tar, -tir?*	*-tar*	*-tar, -tir?*	*-tar*
rel.	?	–	?	–

Mixed preterital endings

This small class has endings that resemble the primary present class III in the singular, and the suffixless-preterital endings in the plural (Table 4.28).

Table 4.28 Mixed preterital endings

	abs.	conj.
1 sg.	?	-Ø (*u*-infection)
2 sg.	?	ʲ-Ø
3 sg.	-Ø	-Ø
rel.	-*e*	–
1 pl.	?	-*(am)mar*
rel.	?	–
2 pl.	?	-*id*
3 pl.	-*atar*	-*atar, -tar, -at*
rel.	-*tar, -atar*	–

Imperative endings
An exotic feature of the Old Irish verbal system is that it knows imperative forms for all persons, active and passive, including the rare 1 sg. There are separate endings only for the 2 sg. and 3 sg. (Table 4.29), the imperatives of all other persons are identical in form to the corresponding dependent present indicative.

Table 4.29 Imperative endings

	Imperative endings
2 sg.	-Ø
3 sg.	-*ad, -ed*

Preterite passive endings
The endings are attached to the dental (or reflex of a dental) of the stem. Traditionally the dental plus the endings below together are analysed as the preterite passive endings (Table 4.30).

Table 4.30 Preterite passive endings

	Preterite passive	
	abs.	conj.
3 sg pass.	-*(a)e*	-Ø
pass. rel.	-*(a)e*	–
3 pl pass.	-*(a)i?*	-*(e)a*
pass. rel.	?	–

Verbal stems

There is a rather clear-cut distinction between so-called 'weak' and 'strong' verbs (Table 4.31), using terminology borrowed from the study of the Germanic languages. With weak verbs, the different verbal stems are derivable from each other by predictable, productive rules. The stem formations are unpredictable with strong verbs. Verbal stems are formed most commonly by suffixation (subjunctive in *a* or *s*, future in *f*, preterite in *s* or *t*), but also by reduplication of the initial of the root (*li-* → future *lili-*; *mad-* → preterite *memad-*), or vowel alternations (*ber-* → future *bér-*; *reth-* → preterite *ráth-*). Weak verbs form their tenses and moods by suffixes, strong verbs by suffixes, vowel alternations (ablaut) and reduplication. Weak verbs have s-preterites, a-subjunctives, and f-futures. With strong verbs, the non-present stem formations depend on the underlying, abstract root shape. Historically the strong verbs are those inherited from Indo-European, their formations are likewise inherited (the verbal roots and formations are listed and analysed in Schumacher 2004; cf. also McCone 1991). They are primary, i.e. underived from nouns or adjectives, whereas the weak verbs are frequently denominative.

Table 4.31 Weak vs. strong verbs

	Weak	**Strong**
Subjunctive stem	*a*	*s*, *a*
Future stem	*f*	*s*, *é*, reduplication
Preterite stem	*s*	*s*, *t*, 'suffixless', reduplication, long vowel
Passive preterite	= pres. + -*th*	ablaut + dental

The present stems and the present tense

Eight major types of present stems can be distinguished: W(eak) 1 and 2, S(trong) 1, 2 and 3, and H(iatus) 1, 2 and 3. The classification is that of McCone (1997: 21–5). An older, widespread classification is that of Thurneysen (1946: 352–8). The two systems can be equated with each other in a concordance as shown in Table 4.32.

Table 4.32 Concordance of McCone's and Thurneysen's classifications of verbs

McCone	Thurneysen
W1	AI
W2	AII
H1	AIII -a-
H2	AIII -i-
H3	AIII -o/u/e-
S1	BI/III
S2	BII
S3	BIV/V

One formal difference between weak and strong verbs is that in the 3 sg. conjunct weak verbs end in a vowel, strong verbs in the root final consonant. There are deponent verbs in the W1 and W2 classes, very few in S2, S3 and the H-verbs, and none in S1. They all take the present deponent endings. The present stems are of importance for the basic classification of the verbs, in particular because the stem class says something about their diachronic morphology. But the formation of the verbal stems outside the present stem correlates only weakly with the distribution of present stems.

W1 has a non-palatalized stem-final consonant throughout the paradigm. For the present tense, it uses the primary present Ia and passive I endings, e.g. *móraid* '(s)he praises'. W1 verbs are often called ā-verbs. Most verbs borrowed from Latin are inflected as W1 verbs.

W2 has a palatalized stem-final consonant throughout the paradigm and uses the primary present IIa and passive I endings. W2 verbs are often called ī-verbs. There are two subtypes. W2a is the main type, e.g. *millid* '(s)he destroys'. W2b has *u* or *o* in the root syllable, e.g. *roithid* 'to make run'. The difference between the two subtypes is of significance only outside the present stem. Because of the productivity of verbs with the denominative suffix *-aigidir*, deponents are specifically frequent among W2 verbs, e.g. *foilsigidir* 'to make public'.

The main distinguishing feature of S1 is an alternation in the consonant quality of the root final consonant. In the main sub-type S1a, it is palatalized in the 2 sg., 3 sg. and 2 pl., but non-palatalized in all other forms, including relatives and passives, e.g. 3 sg. *geilid* '(s)he grazes', but 3 sg. relative *gelas* 'who grazes'. Sub-class S1c features a nasal in the present stem that is absent in all other stems, e.g. *bongaid* 'breaks' with preterite *bobaig* 'broke' vs. S1a *cingid* 'steps' and preterite *cechaing* 'stepped' with an *n* that belongs to the root. S1 verbs take present III and passive II endings. S1 verbs are often called thematic verbs.

S2 has a palatalized root final consonant throughout the paradigm, e.g. *gairid* '(s)he calls'. It takes present IIb and passive I endings, with occasional forms belonging to the passive II ending set.

The rather small S3 class is distinguished by a stem-final nasal that is absent outside the present. The nasal-less root often ends in *-i*, which is of importance for the non-present stem formations, e.g. *lenaid* 'to follow', root *li-*. The present-stem marking nasal is non-palatalized in all verbs except for *ro·cluinethar* 'to hear' where it is palatalized throughout. S3 verbs take present Ib and passive II endings.

The roots of hiatus verbs end in vowels, in contrast to W and S verbs. The endings are added directly to the root-final vowel. When the ending begins with a vowel, a hiatus is the result, hence the name of the class, e.g. *at·taat* /aˈta.əd/ 'they are'. Hiatus verbs basically use the present IIb and passive I ending sets; the schwa of the ending is typically written with *a*.

The root vowel of H1 is *a*, the 3 sg. conjunct is the plain *-á* of the root, e.g. *at·tá* 'he, she, it is'.

The root vowel of H2 is *i*, the 3 sg. conjunct ends in *-í*, e.g. *·bí* 'he, she, it is usually'.

H3 comprises all other root vowels, i.e. *e, o, u*; forms are very rare. Often the 3 sg. conjunct ends in the plain, long root vowel, e.g. *·scé* '(s)he vomits', but occasionally an i-diphthong can be found, e.g. *im·soí* '(s)he turns around' (root *so-*).

Imperfect

All present stems take the secondary endings to form the imperfect. In general, the stem final consonant retains the quality which it has in the present tense, but S1 verbs show a

stronger inclination towards palatalization, e.g. 1 pl. *no·beirmis* 'we used to carry'. Simple verbs without a conjunct particle before them are compounded with the meaningless preverb *no·*.

Imperative

Imperatives add the imperative endings to the present stem. For the imperative of compound verbs only prototonic forms are used, except when object pronouns are infixed, e.g. 3 sg. *(ná·)taibred* 'let him/her (not) give!' vs. *da·bered* 'let him/her give it!'. A handful of verbs are irregular in the 2 sg. in that they use the subjunctive, e.g. *dénae* 'do!'.

The subjunctive stems and the present subjunctive

There are three different formations of subjunctive stems: a-subjunctive, e-subjunctive, and s-subjunctive.

The a-subjunctive is the productive formation. It is formed by all weak verbs, by H1, H3, and S3 verbs, and by those S1 and S2 verbs that do not form an s-subjunctive. In the case of the weak and the hiatus verbs, the a-endings and passive I endings are added to the same stem that is used in the present indicative. This means that, for example, with W1 verbs present indicative and present subjunctive are identical in form except for the 1 sg. and 2 sg. W2b verbs have *o* in their roots in the subjunctive. In the case of S3 verbs, the a-endings are added to the nasal-less root, e.g. 3 sg. *riaid* '(s)he may sell' vs. *renaid* '(s)he sells'. In the case of S1 and S2 verbs, the root final consonant is non-palatalized throughout the subjunctive paradigm, e.g. 2 sg. *gabae* 'you may take' vs. *gaibi* 'you take'. S1c verbs have the root vowel *e* in the subjunctive, e.g. 3 sg. *ní·mera* '(s)he may not betray' vs. *ní·mairn* '(s)he doesn't betray'.

The rare e-subjunctive is only found among H2 verbs. It is formed by exchanging the *i/í* of the present stem by *e/é*, e.g. *do·gné* '(s)he may do' vs. *do·gní* '(s)he does'. When the root is shifted out of the stressed position, the endings are reduced and become identical in form to the a-subjunctive, e.g. *ní·déna* '(s)he may not do'.

The s-subjunctive is one of the most curious morphological categories of Old Irish. It is formed by S1 and S2 verbs whose roots end in a dental or velar stop or in *nn*. The root-final consonant is replaced by *s(s)* to which the primary s-subjunctive (s II) and passive II endings are added. This change is accompanied by various changes of the root vowels (like lengthening) and other processes, which are too divergent to enumerate here, e.g. 1 sg. *ní·gess* 'I may not pray' vs. *ní·guidiu* 'I do not pray', 1 pl. *líasmai* 'we may jump' vs. *lingmai* 'we jump'. The most remarkable forms are found in the 3 sg. conjunct. It is endless, in fact even the *s* of the subjunctive stem is dropped. When the root vowel is stressed, it appears in lengthened form, e.g. 3 sg. *ní·sé* 'may (s)he not sit' vs. *ní·said*. But when the root vowel is shifted out of stressed position, it is either reduced to a short vowel or, more often than not, dropped altogether. The root is then reduced to the mere initial consonant, e.g. *in·ful* 'should (s)he suffer?' vs. *fo·ló* 'may (s)he suffer' from *fo·loing* '(s)he suffers' (root *long-*), or *·op* vs. *as·bó* from *as·boind* 'to refuse' (root *bond-*). In the odd case, the root may be completely lost, e.g. *·comuir* vs. *con·rí* from *con·ric* 'to meet' (root *ic-*). Needless to say, these forms are most challenging to anyone trying to read an Old Irish text.

Past subjunctive

The past subjunctive is formed by adding the secondary endings to the subjunctive stem. Simple verbs without a conjunct particle before them are compounded with the meaningless preverb *no·*.

The future stems and the future

There are seven different formations of future stems: f-future, s-future (unreduplicated and reduplicated), i-future (reduplicated and the íu-variant), and a-future (reduplicated and the é-variant). Besides, a handful of verbs use suppletive formations.

The f-future is the productive future formation of Old Irish and finally ousts all others. It is formed by almost all W1 and W2 verbs, by most H3 verbs, and by stray verbs from other classes. The stem is formed by adding the suffix *-if-/-ib-* to the present stem. The f-future takes the a-ending set and passive I endings. Because of the effects of syncope the vowel of the suffix is usually not visible. In the earliest period the suffix caused palatalization of the root-final consonant, but in W1 verbs this effect was undone under influence from the present stem, e.g. 1 sg. *móirfea* 'I will praise', but later *mórfa*.

Almost all verbs that form an s-subjunctive also form an s-future. One subtype, the unreduplicated s-future, which is formed by seven roots with a basic short *e* in the present and subjunctive stems, is absolutely identical to the s-subjunctive. The reduplicated subtype takes s-future (s III) and passive III endings. The stem is formed by reduplicating the stem of the s-subjunctive. 'Reduplication' means that the initial consonant of the root is doubled, with a vowel intervening between them. The reduplicating vowel is *i*. Reduplication is lost when two or more preverbs precede the root. The consonant after the reduplicating vowel, i.e. the root-initial consonant, is lenited, e.g. 3 sg. *gigis* /gʲiɣʲəsʲ/ '(s)he will pray', beside s-subjunctive *geiss*, from *guidid* 'to pray'. In the 3 sg. conjunct, the *s* of the stem and very often the vowel before it disappear, e.g. *ní·gig* '(s)he will not pray'. There are special rules for almost every verb that belongs here.

The i-future is formed by verbs whose roots end in *i*, i.e. H2 verbs and almost all S3 verbs. It takes i-future and passive I endings. The reduplicated subtype encompasses all eligible verbs whose roots begin with a single consonant. This consonant is reduplicated using *i* as reduplication vowel, and the endings are added right after the root-initial consonant, e.g. 3 pl. *ririt* 'they sell' from *renaid* 'to sell' (root *ri-*). The íu-subtype is formed by words whose roots begin with a sequence of stop + liquid or nasal. It is formed by inserting *íu* (the synchronic reflex of diachronic reduplication) between the two initial consonants; the endings are added right after the second consonant, which is non-palatalized, e.g. 3 sg. relative *gíulas* 'who will follow' from *glenaid* 'to follow' (root *gli-*).

The a-future comprises all other verbs and a handful of verbs that one would expect to find in other classes. It takes the a-ending set and passive I endings. This stem formation enjoys a limited productivity and spreads during Irish-language history. It is not easy to give a simple description of the first subtype, the reduplicated a-future. Like in the case of the reduplicated s-future, special rules have to be observed for almost every verb. The basic rule is that the first consonant of the root is reduplicated with *i* or *e*. If the reduplication vowel is *e*, the root final consonant is non-palatalized, but it is typically palatalized if the vowel is *i*, e.g. 3 sg. deponent *gignithir* '(s)he will be born' from *gainithir* 'to be born', but 1 sg. *cechna* 'I will sing' from *canaid* 'to sing'. The second subtype is the é-future. Like in the case of the íu-variant of the i-future, the long *é* that replaces the vowel of the

root conceals prehistoric reduplication, e.g. 3 pl. *bérait* 'they will carry' from *beirid* 'to carry', or 2 sg. *do·génae* 'you will do' from *do·gní* 'to do'.

The conditional

The conditional is formed by adding the secondary endings to the future stem. Simple verbs without a conjunct particle before them are compounded with the meaningless preverb *no·*.

The preterite stems and the preterite

There are five major types of preterite stem formation: the plain s-preterite and the reduplicated s-preterite, the t-preterite, and the suffixless preterite with two major subtypes, reduplicated and long-vowel preterite. In addition, a few verbs have irregular formations.

The s-preterite is the productive preterite stem formation of Old Irish and finally ousts all others. It is formed by all weak verbs, by most H3 verbs and a few others. The stem is formed by adding the suffix *s* to the present stem. In W2b verbs, the root vowel becomes *o* and the root-final consonant becomes non-palatalized almost everywhere. It takes the s-preterite endings for verbs with active endings, e.g. 3 sg. *carais* '(s)he loved' from *caraid* 'to love', and s-deponent endings for deponent verbs, e.g. 3 sg. *ní·corastar* '(s)he did not put' from *·cuirethar* 'to put'. In the active endings, the 3 sg. conjunct is endingless except for W2a verbs which have *-i* in the earliest period, e.g. *ní·filli* and *ní·fill* '(s)he did not bend' from *fillid* 'to bend'. The reduplicated s-preterite is formed by H1 and most H2 verbs. It is formed by reduplicating the first consonant of the root, using the reduplicating vowel *e*, and adding the s-preterite endings at the end. In the 3 sg. conjunct these verbs end in the root vowel. In the case of roots with two initial consonants, the reduplication is usually not to be seen on the surface, e.g. 3 sg. *do·génai* '(s)he did' from *do·gní* 'to do'.

The t-preterite is formed by all strong verbs whose roots end in a liquid, by a few whose roots end in *g*, and by two verbs with roots ending in *m*. It is formed by adding the suffix *t* to the root. The mixed-preterital endings are added to the suffix, e.g. 3 pl. *celtatar* 'they hid' from *ceilid* 'to hide'.

The so-called suffixless preterite has its name from the fact that changes only occur in front of or inside the root, but no suffix is added to it. It comprises all other strong verbs. The suffixless-preterital endings immediately follow the root. It will suffice here to describe the two major subtypes, the reduplicated and the long-vowel type, each of which has its own subdivisions. The main reduplicating type uses *e* as reduplicating vowel, e.g. 1 pl. *lelgammar* 'we licked' from *ligid* 'to lick'. Other variants have *i* (e.g. 3 sg. *cich* '(s)he wept' from *ciid* 'to weep'), *o* (e.g. *in·lolaig* 'it occupied' from *in·loing* 'to occupy') and *a* (e.g. 3 sg. relative *cachnae* 'who sang' from *canaid* 'to sing') as reduplicating vowels. Although the other subtype, the long-vowel preterites, historically also continues reduplicated formations, synchronically the preterite stem is formed by substituting the root vowel by a long vowel. There is the á-type (e.g. 3 sg. *táich* '(s)he fled' from *teichid* 'to flee'), the í-type (e.g. 1 pl. *fíchimmir* 'we fought' from *fichid* 'to fight'), and various other minor types (*úa, é, íu, ía*, etc.).

A handful of important verbs use suppletive stems. For their inflection typically the suffixless-preterital endings are used.

Preterite passive stem

In the formation of the preterite passive stem one can distinguish between 'weak' formations that look like being derived from the present stem and 'strong' ones that build directly on the root. In either case, the endings are those specific to the preterite passive. In the case of W- and H-verbs, the preterite passive stem is formed by adding the suffix *-th* to the present stem. This is also the formation taken by a few strong verbs. W2b verbs show *o* in their root. Apart from most H-verbs, in the 3 sg. conjunct schwa appears before the dental fricative and the latter is voiced, e.g. 3 sg. *carthae* '(s)he was loved' vs. *ní·carad* '(s)he was not loved' from *caraid* 'to love'.

Most strong verbs, however, have a 'strong' formation of the preterite passive stem. Roots ending in a vowel + liquid metathetize this sequence before the suffix *-th*, e.g. 3 sg. *do·breth* 'was brought' from *do·beir* 'to bring' (root *ber-*). In verbs with roots ending in a nasal, the nasal merges with the suffix to yield /d/, written *t*; the preceding vowel is lengthened, e.g. 3 pl. *ní·céta* 'they were not sung' from *canaid* 'to sing' (root *can-*). In verbs with roots endings in a dental or *nn*, these sounds merge with the suffix to yield *s(s)*, e.g. *messae* 'it was judged' from *midithir* 'to judge' (root *med-*). Finally, after roots ending in a velar the suffix appears as /t/, the velar becomes *ch* or is dropped after *r*, e.g. *ní·bocht* 'it was not broken' from *bongaid* 'to break' (root *bug-*).

The past passive participle and the verbal of necessity

Formally closely connected with the preceding is the past passive participle or verbal adjective. In most cases it is formed by adding the ending *-(a)e* of the i̯o-/i̯ā-adjectives to the dependent form of the preterite passive-stem, e.g. *céte* 'sung'. In those verbs with liquid metathesis in their roots the vowel before the dental is *i*, not *e* as in the preterite passive, e.g. *brithe* 'carried'.

The so-called verbal of necessity or gerundive is only used predicatively in the sense 'has to be X-ed'. It basically uses the same stem as the past passive participle, but it has the uninflected ending *-(a)i*.

The verbs 'to be'

'Being' is expressed in Old Irish by a relatively wide range of expressions with a variety of syntactic and semantic structures (Ó Corráin 1997). In morphology and syntax, the language distinguishes two different verbs 'to be'. For the use as copula, that is, in predication, the irregular verb *is* is used. It links the immediately following predicate (an adjective, noun, or pronoun) with the subject and has no semantic value of its own. The copula is unlike any other Old Irish verb in that it is unstressed. It merges with any preceding sentence particle and it is proclitic to the predicate. The subject comes in third place, e.g. *is aicher in gáeth* 'the wind (*gáeth*) is sharp (*aicher*)'. Any particle that would normally be affixed to a verb is added after the predicate, e.g. *am cimbid-se* 'I am a prisoner'. In fronting constructions, the copula has also the function to award emphasis to a constituent of the sentence. Despite being unstressed, the copula is fully inflected and is marked for all verbal dimensions. It belongs to none of the verbal classes outlined above; its idiosyncratic forms are too numerous to be listed here (see Thurneysen 1946: 483–492; Strachan 1949: 72–73; Stifter 2006: 386). The copula is often omitted on the surface, in particular when no indicator of tense is required.

The so-called substantive verb has the semantics of existence, presence, being in a certain condition. It is often used with prepositional phrases and adverbs. In certain constructions it can also take on functions of the copula, a tendency that increases in Modern Irish. The substantive verb behaves like an ordinary verb and is fully stressed. In the present indicative, two forms are distinguished, an unmarked form *at·tá* (inflected as a H1 verb), e.g. *at·tó oc precept* 'I am preaching (right now)', and a marked, habitual form *biid* (H2), e.g. *bíth a menmae fri seilg* 'his mind is constantly set on hunting'. Apart from suppletive forms, of which a great number can be found in this verb (e.g. ·*fil*, ·*feil* after conjunct particles, *fil(e)* as relative, *ro·ngab*, ·*dixnigedar*, *do·coisin*), outside the present only the stem of *biid* is found, but lacking the habitual connotation.

'Being' and 'having' are correlated in Old Irish. Lacking a verb for 'to have', the language expresses the concept of possession in terms of spatial proximity by pronominal and locatival constructions with the substantive verb or with the copula, e.g. *nín·tá* 'there is not to us = we have not', *táthut* 'you have', *at·tá limm/dom/ocum* 'there is with me, to me, by me', *is limm* 'there is with me'.

Augmentation

Except for the imperative, all Old Irish verbs can be marked for the dimension that I termed 'perspectivity' above, that is, with the addition of the perspective marker a verbal action is looked upon from a different, non-contemporary angle. The two perspectives thus expressed are retrospective (resultative, perfective) and prospective (potential) (McCone 1997: 93), e.g. 3 sg. *ní·epert* '(s)he did not say' vs. *ní·érbart* '(s)he has not said' or 1 sg. *ní·epur* 'I do not say' vs. *ní·érbur* 'I cannot say'. Because typically an already complete verbal form is augmented by a particle, adding a marker of perspectivity is called 'augmentation', a term introduced by McCone in the most comprehensive description of the process (1997: 91), and verbal forms thus affected are called 'augmented'. In traditional grammars, augmented forms are called 'perfective'. The morphology is identical for both perspectives. In practice, augmentation of either type is very frequent with preterites, subjunctives and the present tense (in descending order), and very rare with futures and conditionals. In subordinate clauses, augmented forms can express anteriority in relation to the matrix clause. The Old Irish system of augmentation, which is a purely grammatical process in synchronic terms, has developed from a system where the addition of various lexical particles conferred verbal aspect.

By far the most common type of augmenting is to add the grammatical particle *ro*. In Old Irish it is pre- or infixed before the root, very often right within the preverbal chain, thereby causing disruptions of the syncope pattern, e.g. 1 pl. *gesmai* 'we would pray' vs. *ro·gessam* 'we may pray', or 3 pl. *do·ecmallsat* 'they collected' vs. *do·érchomlasat* 'they have collected'. Verbs with the lexical preverb *cum*, whose second element begins with a consonant other than *f*, use *ad* as augment, e.g. 2 sg. *con·tolae* 'you would sleep' vs. *con·atlae* 'you may sleep'. Because of syncope, it may disappear on the surface, its presence only being betrayed by the different syncope pattern, e.g. *ní·cotlae* 'you would not sleep', vs. *ní·comtalae* 'you may not sleep'. The augment *cum* is restricted to a few compounded S1 and S3 verbs, e.g. 3 sg. *in·fíd* '(s)he told' vs. *in·cuaid* '(s)he has told'. In some verbs augmentation is achieved by root and/or stem suppletion, or other preverbs are used, e.g. from *mligid* 'to milk' we find 1 sg. augmented preterite *do·ommalg* 'I have milked', or 3 sg. *fo·caird* '(s)he put' vs. *ro·lá* '(s)he has put'. *Do·beir* 'to give, bring' is special in that it has two different augmented stems for its different meanings, i.e. *do·rat* '(s)he has given' and *do·ucc* '(s)he has brought'. Some verbs are indifferent to augmentation,

especially those that are already compounded with *ro* as a lexical, not a grammatical preverb, e.g. *ro·icc* 'to reach'.

The positional behaviour of the particles, in particular of *ro*, is highly intricate (McCone 1997: 127–161). The tendency within Old and Middle Irish is for *ro* to replace all other types of augmentation, and for the particle *ro* to be placed progressively closer to the beginning of the verb, e.g. earlier *con·atail* vs. later *ro·c(h)otail* '(s)he has slept'.

Relativity

Old Irish is very remarkable in that fundamentally it does not indicate relativity by overt relative pronouns or particles. Instead it indicates relativity on the verbs that head relative clauses. All finite verbal forms except imperatives can be so marked. Imperatives are usually replaced by subjunctives in relative constructions (but see Ó hUiginn 2002). 'Relative constructions' are opposed to non-relative 'main-clause constructions'. In descriptions of Old Irish, the term 'relative construction' is employed in a wider sense than usual and subsumes all kinds of subordinate clauses in which 'relativity', i.e. subordination, is in some way formally marked. This includes relative clauses in the narrow sense, complement clauses, as well as various types of clauses introduced by conjunctions. Some conjunctions, however, take main-clause constructions.

Relativity is marked by a complex set of morphological, syntactical, and lexical means. It can be formally expressed by:

1 *Relative inflectional endings.* The absolute inflection of simple verbs has special relative endings in the third persons, and in the 1 pl., e.g. 3 sg. *caras* 'who loves, whom loves' vs. *caraid* '(s)he loves'. When relativity is expressed by those endings, this is to the exclusion of all other means of relative marking.

2 *Relative mutation.* Verbal forms that are not capable of taking special relative endings, that is, 1 sg. and the second persons of simple verbs and all verbs with conjunct inflection, as well as verbal forms that are not dependent on a conjunction or preverbal particle, mark relativity by either leniting or nasalizing the stressed portion of the deuterotonic verbal form. For that purpose, simple verbs are compounded with the empty particle *no·*, e.g. 2 pl. *no·charaid* 'that what you love' vs. *carthae* 'you love'. Due to the spelling rules, the mutations are not always visible in the written text, e.g. 3 sg. *do·beir* /doˈβʲerʲ/ 'that what (s)he brings/gives' vs. *do·beir* /doˈbʲerʲ/ '(s)he brings/gives'. The difference between so-called 'leniting' and 'nasalizing relatives clauses' is syntactic and semantic; see the section on syntax below.

3 *Class C infixed pronouns.* Verbs in relative constructions, as well as verbs after conjunctions that require relative constructions, use class C infixed pronouns, e.g. *nod·chara* 'who loves it' vs. *na·chara* '(s)he loves it'. There are some restrictions on this rule: in proper relative clauses, the use of class C pronouns is obligatory only when the pronoun is a third person, e.g. *nodom·chara* and *nom·chara* 'who loves me' vs. *nom·chara* '(s)he loves me'.

4 *Relative negation.* Verbs in relative constructions use the negative particles *ná·*, *nád·*, and *nach-* before infixed pronouns. They are merged with preceding conjunctions, e.g. *arnacham·roilgea* 'that he may leave me not'.

5 *Relative particle.* Only when the verb of the relative clause is governed by a preposition, i.e. in prepositional relative clauses, do we find something that could be called an overt relative particle. It has the shape *-(s)a*ᴺ which is added directly to the clause-initial preposition. A dependent verbal form follows the relative preposition. After leniting prepositions the particle appears without the *s*, e.g. *dia·tá* 'from which is'. When the *s* is present, the *a* may be optionally elided, e.g. *fris·tardam* 'against which we can give'.

Negatives and infixed pronouns follow the preposition, e.g. *asnacha·tucad* 'out of which he would not have brought them'.

6 *When the relative clause is dependent on pronominal 'that which', the neuter article a[N] is used.* Although the article is strictly speaking part of the matrix clause, it can be (and indeed was) interpreted as a relative marker.

Verbal noun and *do*-infinitive

The non-finite formations past passive participle and verbal of necessity were discussed above. The most important non-finite form of the Old Irish verb, however, is the verbal noun. It is a verbal abstract, that is, it only shares the semantics with the corresponding verb, but otherwise it behaves syntactically like any noun (Gagnepain 1963). It is fully inflected, it can appear in any position where nouns occur, and – the most important difference to the infinitives of most European languages – when transitive, it governs objects in the genitive, not in the accusative, e.g. *tabart díglae* 'the bringing of revenge = to bring revenge'. Subjects are encoded by the prepositions *do*[L], *la*[H], *ó/úa*[L] (Müller 1999). Pronominal objects are expressed by possessive pronouns, e.g. *mo ṡerc do Día* 'God's love to me' (!), or *dum ḟortacht húait-siu* 'for my help from you = that you help me'. In the case of intransitive verbs, the subject may be expressed by the genitive or possessive pronoun, e.g. *turcbál gréine* 'the rising of the sun', or *a thíchtu* 'his coming'.

The formation of a verbal noun to any given verb is unpredictable. Sometimes verbal nouns consist of the mere verbal root, e.g. *ás* 'the growing, growth' to *ásaid* 'to grow', or *rád* 'the speaking, speech' to *ráidid* 'to speak'. Sometimes the verbal noun is suppletive, e.g. *serc* 'the loving, love' to *caraid* 'to love', or *dígal* 'revenge' to *do·fich* 'to revenge'. The common method, however, is to derive the verbal noun from the verbal root by suffixation. A frequent suffix is *-ad*, *-iud*, which is usually employed with weak verbs, e.g. *léiciud* to *léicid* 'to let go, to leave'. A plethora of other suffixes is found especially among strong verbs. The suffix *-ál*, which has become productive in Modern Irish, is restricted to *gabál* and compounds in Old Irish, from *gaibid* 'to take, to seize'.

A frequent use of verbal nouns is after various prepositions to form adverbial phrases or nominal complements of verbs. The construction with the preposition *oc* 'at, by' to indicate contemporary action, which provides the present continuous in Modern Irish, is only just incipient in Old Irish, e.g. *bíu-sa oc irbáig* 'I am continuously boasting'.

Although Old Irish has no morphological infinitive, it has developed a syntactic equivalent in the construction *do* 'to, for' + verbal noun. This so-called '*do*-infinitive' is used in a very similar manner to the English *to*-infinitive, e.g. *is ferr ainm do dénum de* 'it is better to make a noun out of it' (Stüber 2009).

SYNTAX

In all periods of its attestation Irish has been a consistent VSO language. V is best considered not as the plain verb, but as the verbal complex, which incorporates pronouns and sentence-modifying particles including negatives, interrogatives, certain preverbal conjunctions, etc. The verbal complex may only be preceded by a few preclausal conjunctions such as *má* 'if', *úare* 'because', *ocus* 'and', etc. Additional constituents (adverbs, prepositional phrases) follow after the object, e.g. *benaid Cú Chulainn omnai ara ciunn i suidiu* 'C. Ch. cuts down (*benaid*) a tree (*omnai*) before them (*ara ciunn*) there (*i suidiu*)'. This order is disrupted on the surface only if one of the basic constituents S and/or O is

pronominal. It is then drawn into the verbal complex. The subject is expressed by the verbal ending alone, pronominal objects by affixed pronouns, e.g. *con·sreng in curach dochum poirt* 'he (Ø) pulls (*con·sreng*) the boat (*in curach*) to the port'; *dos·géni de chrí cen madmann* 'he (Ø) made (*do·géni*) them (*-s*) of clay without breaking'. In predicative sentences, the unstressed copula together with the immediately following predicate occupies the V-position, e.g. *it gilithir snechtae in di dóit* 'the two arms (*in di dóit*) are (*it*) as bright as snow (*gilithir snechtae*)'.

As expected, adjectives and dependent genitives follow their head noun. Only determiners, i.e. possessive pronouns, some pronominals, and numerals, precede their head noun, e.g. *téora aidchi* 'three nights', *nach lebor* 'each book'. Relative clauses always follow their head.

These rules are valid for Old Irish prose, which doubtlessly reflects the spoken standard language. In the so-called *retoiric* style, a stylized language found in poetry and early laws, other rules obtain. Genitives and adjectives may precede the noun, the verb – separated from sentence-modifying particles – may be placed at the end of the sentence (the so-called Bergin's rule construction, whereby the verb appears in its dependent form; Bergin 1938), or compound verbs may stand in tmesis, i.e. the first preverb separated from the rest of the verb, e.g . . . *nád n[D]é deragam* '. . . that we may not avenge God' (prose order: *nád·nderagam Día*). This style is also accompanied by a reduced role of the article and a greater prominence of prepositionless adverbial expressions, e.g. *dim láim rígdai brechtaib ban mberar* 'from my royal hands he is carried away by incantations of women' (in prose order: *berair dim láim . . .*). In extreme examples the position of almost all elements can be reversed, e.g. *fairrge al druim dánae fer* 'a bold man over the sea's ridge' (in prose order: *fer dánae al druim fairrge*). It is disputed how much of this style is truly archaic, i.e. continues prehistoric word ordering rules, or how much of it is archaizing, artificial, perhaps crafted after the model of Latin syntax (see Corthals 1999, Eska 2007).

Constituent movements

The basic word order can be disrupted by diverse movements of the constituents or of parts of the constituents (see, e.g., Mac Giolla Easpaig 1980, Mac Coisdealbha 1998). At the sentence level, Old Irish knows two major rules of constituent movements: rightward and leftward.

Rightward movement of 'heavy' constituents serves discourse-pragmatic purposes, in order to keep the fundamental structure of the sentence transparent. No further syntactic rules apply. Constituents that consist of more than two parts are moved to the right margin of the sentence in accordance with Behaghel's Law of Increasing Terms if the underlyingly successive constituent is considerably shorter, e.g. $[ní·foircnea]_V$ $[in fíni]_O$ $[ithe neich di anúas]_S$ 'eating something of it from above does not put an end to a vine', or $[imm·folngi]_V$ $[inducbáil]_O$ $[dó]_{PP}$ $[in molad ro·mmolastar Día]_S$ 'the praise by which he has praised God causes glory to himself', or in a predicative sentence: $[biid]_{cop./v.subst.}$ $[duine]_S$ $[slán ocus fírián]_{Pred}$ 'man is sound and righteous'. In the latter case, the substantive verb must be substituted for the copula. Even constituents themselves can be so split, e.g. $[(ní)·gáid]_{V+S}$ $[do Día]_{PP}$ $[dígail [_x]]_O$ $[for Saul]_{PP}$ $[_x inna n-olc do·rigéni-side fris]$ 'he did not pray to God for vengence on Saul for the bad things he had done to him'.

The purpose of leftward movement is topicalization by fronting. This discourse-oriented process entails special syntactic constructions. Any part of the sentence, even the verb and subordinate clauses, may be emphasized by promotion to the fronted position. The fronted phrase is introduced by an appropriate form of the copula, the rest of the sentence follows

in a relative construction, e.g. *is óenḟer gaibes búaid diib* 'it is one man who takes victory from them' (non-emphatic: *gaibid óenḟer búaid diib*), or *is do thabairt díglae beirid in claideb-sin* 'it is to inflict vengence that he carries this sword' (non-emphatic: *beirid in claideb-sin do thabairt díglae*). For the possible types of relative constructions see the relevant section below. This type of construction is called cleft sentence.

Another subtype of leftward movement is the nominativus pendens ('hanging nominative') construction. In it, the emphasized part of the sentence is promoted to the front, where it is placed in the nominative, without being introduced by the copula. The rest of the sentence follows in a non-relative construction, the emphasized part is resumed by an appropriate pronominal element, e.g. *cluiche n-aímin inmeldach, agtait fir ocus mná* 'a pleasant and delightful game, men and women play it'.

Leftward movement as a regular process is also found with adjectives. In ordinary prose, an adjective may be promoted to the position before its head noun. In this case, however, the two are compounded, the adjective remains uninflected, and the two words form an accentual unit, the adjective bearing the stress, e.g. *fírbrithem* 'a just, truthful judge' vs. *bretha fíra* 'just judgements'. Some adjectives can only appear in this type of construction.

Subordination and co-ordination

In the narrative style of the sagas, Old Irish displays a predilection for co-ordinating sequences of short self-contained sentences. Nowhere can be found intricately subordinated periods of the type known from Latin. Nevertheless, relative constructions are very prominent in Old Irish (see the following paragraph), and other types of subordinate clauses are not unknown. Subordinate clauses that are somehow removed from reality (expressing wishes, orders, etc.) take the subjunctive mood, very often augmented. All conjunctions used for co-ordination and subordination are listed in the relevant section below. Some of the subordinating conjunctions appear artificial and may be calqued on Latin, e.g. *lase* 'when' (< *la* 'with' + *se* 'that') after Latin *cum*.

There is a tendency in the language to substitute subordinate clauses (complement clauses, various adverbial clauses) by converb constructions, i.e. constructions of temporal and modal prepositions + verbal nouns (VN). Well-known examples of this are *oc* 'at, by' + VN to describe continuous, contemporary action and *íar* 'after' + VN for past actions, e.g. *fecht do Pátraic oc ingaire caírech* 'once for Pátraic at herding sheep = once when Pátraic was herding sheep', or *ná·scarad frit íar chreitim* 'let her not part from you after believing = when she has started to believe'. The negative equivalent to *oc* is *cen* 'without' + VN, e.g. *is ingir lem cen chretim dúib* 'it grieves me that you are not believing'. The preposition *do* 'for' can substitute final clauses, but it takes on a life of its own and becomes a downright infinitival construction in Irish, e.g. *húare nád·rogaid uisce do thinnaccul* 'because he had not asked for water to be given = that water be given'. An example for the use of the VN as complement of verbs of saying is *is airi as·beir-som a epert doib* 'it is therefore that he says that they said it'.

Relative constructions

Old Irish has different types of relative constructions, depending on the relationship between the antecedent, i.e. the relativized head, and the relative clause. The basic types are leniting and nasalizing relative clauses (for the latter see McCone 1980, Ó hUiginn 1986).

1 When the head is the subject of the relative clause (= subject antecedent), or when it is a neuter object pronoun, a leniting relative construction follows.

2 When the head is the object (= object antecedent), there follows a nasalizing relative construction. In the course of time, the leniting relative construction takes over this function.

3 In the early period, a relative construction could also express genitival or various adverbial relations, corresponding to the use of the independent prepositional case (Breatnach 1980).

4 When the antecedent, i.e. the head, provides certain adverbial concepts (time, manner, extent, instrument) for the relative clause, a nasalizing relative construction follows. Likewise several adverbial conjunctions require nasalizing relative constructions.

5 In the figura etymologica, when the antecedent is the verbal noun of the relative verb, a nasalizing construction is used (Ó hUiginn 1983).

6 Complement clauses can be introduced by nasalizing relative constructions, but main-clause constructions may also be used (Ó hUiginn 1998).

7 When the antecedent is in a prepositional construction within the relative clause, but not in the matrix clause, a prepositional relative construction is used.

8 When a prepositional phrase has been fronted for emphasis (= prepositional antecedent), the relativity of the rest of the sentence finds no formal expression, but a straightforward main-clause construction is used.

The difference between leniting and nasalizing constructions does not apply to those relative verbal forms that are distinguished by separate relative endings. But even in these cases the nasalization of nasalizing construction may be indicated on the initial of the verbs.

Conjunctions

In the following list of Old Irish conjunctions, superscript ^{L} and ^{N} mean that the conjunction lenites/nasalizes the initial of the immediately following element, irrespective of the type of clause. Superscript ^{RN} means that a nasalizing relative clause follows the conjunction. This may very often be substituted by a non-relative construction. Where a conjunction is not marked ^{RN}, a non-relative main clause construction follows it. 'Independent' or 'dependent' mean that independent or dependent verbal forms follow the conjunction.

Copulative and disjunctive conjunctions
Independent:
1.1 *ocu(i)s*^{L}; *os* 'and' (the normal connector of co-ordinated phrases and clauses)
1.2 *scéo*^{L}, *scéu*^{L} 'and' (only in early poetry and *retorics*)
1.3 *-ch* 'and' (only in early texts, usually suffixed to proclitics)
1.4 *noch* 'and; however' (sometimes used at the head of a main clause as an emphatic form of 'and;' more often used in adversative or causal meaning, accompanied by *ém*, *ám* 'indeed', *immurgu* 'however' or *colléic* 'yet')
1.5 *sech*$^{(L?)}$ 'and' (combines two parallel clauses)
1.6 *eter* . . . *ocus*^{L} . . . (*ocus*^{L} . . .) 'and' (links parallel elements into a larger unit)
1.7 *sech* 'however, that means' (usually followed by the copula)
1.8 *emid*$^{(RN\ ?)}$ . . . *emid*$^{(RN\ ?)}$ 'as well . . . as' (on its own *emid* means 'nearly; as it were')

1.9 *no*^{L}, *nó*^{L}, *nu*^{L}, *nú*^{L} 'or'

1.10 *rodbo*^{L}, *rodbu*^{L}, *robo*^{L}, *robu*^{L} 'either . . . or'

1.11 *airc*, *airg(g)* 'or'

1.12 *cenmithá*^{RN} or independent clause 'besides that'

Temporal conjunctions
Independent:

2.1 *in tain*^{RN}, *in tan*^{RN}, *tan*^{RN} 'when'

2.2 *a*$^{N + RN}$, neg. *an(n)a* ^{RN}, with *ro*: *arru*-^{RN}, *anru*-^{RN} 'when, while'

2.3 *lase*^{RN} 'while, when; rarely: whereas'

2.4 *céin(e)*^{RN} 'as long'

2.5 *ó*^{L} 'since; after; because'

2.6 *íarsindí* 'after'

2.7 *resíu*, *risíu* 'before' (followed by an augmented subjunctive; later followed by ^{RN})

Dependent:

2.8 *dia*^{N} 'when' (only with the narrative preterite)

Consecutive and final conjunctions
Independent:

3.1 *co*^{L}, *coni* 'so that, in order that'

3.2 *afameinn*^{RN}, *abamin*^{RN} 'if only'

3.3 *dano* 'then; so, also'

3.4 *didiu* 'then; now'

3.5 *trá* 'now, therefore, then'

Dependent:

3.6 *co*^{N}, *con*^{N}, *con(n)a*, *con(n)ac(h)on* 'until; so that; in order that, that (explicative)'

3.7 *ara*^{N}, neg. *arna*, *arná*, *arnac(h)on* '(so) that; in order that; that (explicative)'

Conditional conjunctions
Independent:

4.1 *ma*^{L}, *má*^{L}, neg. *mani* 'if'

4.2 *acht* 'provided that; if only' (followed by an augmented subjunctive)

Dependent:

4.3 *dia*^{N} 'if' (in positive conditional clauses with the subjunctive)

Causal conjunctions
Independent:

5.1 *(h)óre*^{RN}, *húare*^{RN} 'because, since'

5.2 *fo bíth*^{RN} 'because'

5.3 *dég*^{RN} 'because'

5.4 *ol*^{RN}, neg. *ol ni* 'because'

5.5 *a(i)r*$^{(L)}$ 'since, for'

Adversative conjunctions
Independent:

6.1 *cammaib*, *cammaif* 'however, nevertheless'

6.2 *immurgu* 'however'

6.3 *acht* 'but, except' (in the context of negative clauses also 'only')

6.4 *cía*^{L}, *cé*^{L}, neg. *cení*, *ceni*, *cini* 'although, even if; also: that (explicative)'

Dependent:
6.5 *in*[N] . . . *in*[N] . . . 'be it . . . or be it . . .'
6.6 *in*[N] . . . *fa*[L] . . . 'be it . . . or be it . . .'

Comparative conjunctions
Independent:
7.1 *amal*[RN] 'as; as if'
7.2 *feib*[RN] 'as; as if'
7.3 *in chruth*[RN] 'so, as'
7.4 *is cumme*[RN] 'it is the same as if' (the compared clauses linked by *ocus*)

Negation and interrogation

All negatives of Old Irish are conjunct particles, that is, the dependent form of a verb follows. The negatives are part of the verbal complex and always precede the stressed portion of the complex. The main-clause negative particle in declarative sentences is *ní·* with its variant *nícon·* (later *nocha·*, *nacha·*). In all other types of sentences and clauses (before imperatives, in relative constructions), the negative is *na·*, *ná·*, *nad·*, *nád·*, *nacon·*, with many variants (Ó hUiginn 1987). In relative constructions, the particle has mutating effects, depending on the type of relative. When pronouns are infixed, the stem *nach-* is used. The negatives merge with preceding particles or conjunctions. When a conjunction requires a non-relative main-clause construction, *ní·*, *ni·* is used, e.g. *mani·* 'if not', *ceni·* 'although not', otherwise the forms with *a* appear, e.g. *arná·* 'in order that not', *ana·* 'when not', etc.

The interrogative particle of Old Irish is the conjunct particle, *in*[N]·, negative *innád*[N]·. It always comes before the stressed portion of the verbal complex.

WORD FORMATION

Old Irish is not only rich in inflectional morphology, but also in derivational morphology. The language is always open to forming new words from existing ones whenever the need arises. In the nominal domain, two major strategies are found: suffixation and composition. By the addition of derivational suffixes to existing words, a nominal stem can either be transferred into a different semantic class, e.g. agent noun *druí* 'druid' (inflectional stem *druíd-*) → abstract *druídecht* 'druidry', or abstract *flaith* 'lordship, rule' → agent noun *flaithem* 'ruler', or a different part of speech can be derived from it, e.g. noun *menmae* 'mind' → adjective *menmnach* 'mindful', or adjective *lúthmar* 'swift' → noun *lúthmairecht* 'agility'. The derivation of adjectives is especially common with the suffixes *-dae* and *-a/ech*. In composition, two (rarely more) independent lexical items are combined under a single stress to form a new lexical item whose meaning typically extends beyond that of a simple combination of the meaning of the base elements. Only the last element is inflected. The major types of Old Irish compounds are determinative compounds, i.e. where the first element qualifies the second, e.g. *fírbretha* 'true judgements' (*fír* 'true' + *bretha* 'judgements'), possessive compounds, i.e. compounds that attribute the quality that is expressed by the members of the compound to an external entity, e.g. *cambṡrón* 'crooked-nosed one' (*camb* 'crooked' + *srón* 'nose'), and dvandva-compounds, i.e. two elements that are connected in some sense, e.g. *cennainim* 'head and soul' (*cenn* 'head' + *ainim* 'soul'). For nominal morphology in general, see De Bernardo Stempel (1999); abstracts with dental suffix are treated in Irslinger (2002), nasal stems in Stüber

(1998). Productive adjective formations are treated in Russell (1990) and Wodtko (1995). Uhlich (1993: 78–139) and Stüber (2006) discuss the types of nominal compounds with special reference to OIr. personal names.

In the verbal system, prefixation and suffixation are the main word-forming strategies. Prefixation works only within the class of verbs. In this process, which diminishes in importance during the Old Irish period, one or several items of the closed class of lexical preverbs are added in front of an existing verbal stem, compounded or not, e.g. *soid* 'to turn' (root *so-*) → *im·soí* 'to turn round' (stem *imm-so-*), or → *do·intai* 'to turn back' (stem *to-inde-so-*). Suffixation typically turns a non-verbal stem (noun or adjective) into a verbal stem, the synchronically most important suffix for this is *-aig-*, which inflects as a deponent W2 verb, e.g. *menmae* 'mind' → *menmnagaidir* 'to think, judge, deem'.

MIDDLE IRISH

Middle Irish does not refer to a uniform, let alone standardized, linguistic entity, but it is rather a term of convenience for the transitional period between two linguistic standards, Old Irish and Modern Irish. Middle Irish is a cover term for a heterogeneous set of restructurings, engendered by a complex interaction of phonological developments and morphological levelling. Two factors were responsible in major ways to bring about the changes from Old to Middle and then on to Modern Irish. Phonological erosion among unstressed vowels led to the loss of grammatical distinctions and categories which in turn necessitated the restructuring especially of the nominal and pronominal sector. The complexities and redundancies of the Old Irish verbal system lent themselves almost naturally to drastic simplifications and regularizations. It must not be overlooked, though, that a number of the features which seem characteristic of the language of the tenth–twelfth centuries are already sporadically attested in the Old Irish glosses (McCone 1985) and may be assumed for the spoken language of that time. The simplification of morphological complexities was already under way in Old Irish.

Middle Irish scribes and authors strove for the Old Irish standard, which they must have learned in school, but they were not always successful and so produced countless hypercorrect forms. It is not always easy to say whether a particular Middle Irish form, especially in the verbal system, was *sprachwirklich* (used in the spoken language) at some stage, or whether it is an artifact of an erring scribe. In that sense it must be remembered that anything recorded here as typically Middle Irish is not to be seen as distinguishing it in essence from Old Irish, but that it is rather an option in Middle Irish that can be added to an Old Irish fundament. The old and the new system are inextricably interwoven.

Since there are no profound syntactical changes from Old to Middle Irish a special section for syntax has been omitted. Those changes that result from newly developed categories and formations will be referred to in the morphological sections.

With no full grammar of Middle Irish existing, the best descriptions are Breatnach (1994), McCone (1997: 163–241; 2005: 173–217), and Jackson (1990: 73–140; for one particular tale).

PHONOLOGY AND ORTHOGRAPHY

The sound inventory is fundamentally similar to that of Old Irish, albeit due to neutralizations the positional distribution and relative frequency of occurrence of some sounds

have changed. Most consequential is the reduction to schwa of all those unstressed vowels which had previously possessed a distinct quality in Old Irish, i.e. vowels in pre-tonic syllables and vowels in absolute final position. Less disruptive for the grammatical system are other changes such as loss of hiatuses by merging them into monophthongs or diphthongs, the reduction of the number of diphthongs, and shifts in the syllable peaks from the originally stressed vowels to the on-glide of the following consonant, e.g. *duine* 'person', Old Irish /dunʲe/ > /duⁱnʲe/ > Middle Irish /dᵘinʲə/, or *fer* 'man', Old Irish /fʲer/ > /fʲeᵃr/ > Middle Irish /fʲar/. Disyllabic proclitics lose an initial vowel, e.g. the article *inna* > *na*. The consonants are less affected by changes. The changes *nd > nn*, *mb > mm*, *ld* and *ln > ll* had already begun in Old Irish. In late Middle Irish lenited *d* and *g* merge in /ð/ and /ɣʲ/. Voiceless initial stops of unstressed words are voiced. Attempts have been made by Carney (1983) to date the sound changes that separate Old from Middle Irish.

The traditional orthography of Old Irish remains remarkably stable until the end of the twelfth century, i.e. until the end of the Middle Irish period, although it was fairly histor-ical by that time. The main deviations from the earlier standard lie in frequent spelling confusions of those sounds that had merged, e.g. *nd* and *nn*, or *oí/aí/uí*, etc.

NOMINAL MORPHOLOGY

During the Middle Irish period the neuter gender loses more and more ground until it finally disappears altogether from the language. Most old neuter nouns are assigned to the masculines.

There is a tendency to confuse accusatives and nominatives, with one of the two win-ning out in different inflectional classes and in different numbers. In the plural of consonant stems this means that quite distinct and strongly marked inflectional endings arise. This change (in the singular), together with the loss of neuters, leads to a considerable reduction of grammatical prominence for the nasal mutation.

The loss of a distinct quality of final vowels has the effect that in the i̯o- and i̯ā-stems all case distinctions except for the prep. pl. are lost. The situation is remedied by taking over the new, amplified endings of the t-stems in the plural.

Eventually all these changes, and others, conspire to build a system where the main distinction lies between a singular and a plural form. Less important are further oppo-sitions within the numbers between a 'casus rectus' (the old nominative and accusative) and a genitive, and between the 'casus rectus' and a 'casus obliquus' (after prepositions), marked in the plural by *-(a)ib*. The inherited distinctions of nominal stem-classes become very blurred.

In the adjectival declension, a system is approached where there is a distinction made mainly between singular and plural, the latter characterized by an added schwa (*-a* or *-e*). The ending *-(a)ib* of the prepositional plural is given up, as in the article.

In adjective gradation, the equative in *-ithir* is replaced by that with the prefix *com-*. The superlative is given up as a morphological category, the comparative taking over its function. The distinction between the two grades is effected by syntactic means. Adverbs are formed with the preposition *co*[H].

NUMERALS, PRONOUNS AND PRONOMINALS

The main change among numerals is the loss of gender distinctions in the numbers 2–4, the masculine forms winning out everywhere. Personal numerals can be construed with a qualifying gen. pl., e.g. *tríar láech déc* 'thirteen warriors'.

Apart from a certain amount of morphological changes, the most important development involving independent personal pronouns is the gradual expansion of their syntactic functions also to those of object and subject pronouns of finite verbs. These personal pronouns have a preference for sentence-final position. This is a substantial step away from the grammatical system of Old Irish that entirely did without pronouns of that kind.

Nevertheless, infixed pronouns continue to be used regularly in the written standard. The three classes A–C influence each other formally, especially in the shapes of the third-person pronouns. Occasionally there is confusion between the different classes. Because of the formal similarity of 1 sg. and 2 sg. pronouns with the corresponding possessive pronouns, the 1 pl. and 2 pl. possessive pronouns lend their shape also to the infixed pronouns.

A consequence of the loss of the neuter gender and of the further reduction of unstressed vowels was that verbs with infixed 3 sg. neuter pronouns were no longer correctly understood. Instead they were analysed as unmarked verbal forms and were generalized as such, thereby introducing obligatory but meaningless lenition into the stressed portion of the verbal complex, e.g. Old Irish *at·beir* /adˈβʲerʲ/ '(s)he says it' > /ədˈβʲerʲ/ '(s)he says', or *ní·thabair* /nˠːʲiːˈθaβərʲ/ '(s)he does not carry it' > '(s)he does not carry'. The phonological opposition between main-clause and lenited-relative verbal forms is thereby eroded.

The unstressed prepositions suffer phonological attrition, leading to the merger of some, e.g. *ar* 'before', *íar* 'after', *for* 'upon' > /ər/. The stressed counterparts with suffixed pronouns are less affected, but a certain amount of levelling of the allomorphies in the ending sets occurs. The distinction between prepositions that take the accusative and those that take the prepositional breaks down.

VERBAL MORPHOLOGY

Of all subsections of grammar, the verbal system experiences the most pervasive changes during the Middle Irish period. The complex and non-transparent allomorphy paves the way for an almost complete breakdown of the system, which is rebuilt on a much simpler basis. Naturally, these changes occurred in a slow, piecemeal fashion, taking many detours and by-passes. They cannot be retraced here, but only the main directions of the developments shall be sketched. A detailed account of what happened to the verbal system in Middle Irish can be found in McCone (1997: 163–241).

The dimensions of the Irish verb are reduced. Perspectivity is ultimately lost by the facts that preterites augmented by *ro* oust their non-augmented counterparts, thereby eliminating any contrast between resultative and non-resultative verbal forms, and that potential augmentation is given up in favour of lexical means of expressing possibility. The dimension of deponentiality is also lost by the demise of the deponent ending set, a development that already sets in during the Old Irish period; the active endings spread to earlier deponent verbs. The deponent endings remain only in the 1 sg. conjunct a-subjunctive *-ar* and in the 3 sg. s-preterite *-astar*, and, because they are more highly distinctive, oust their non-deponent counterparts.

The most important structural novelty is the generalization of the weak pattern of stem-formation also to strong and hiatus verbs, with a predictable formation of the f-future, a-subjunctive, s-preterite and preterite passive stems on the basis of the present stem. Beside the f-future, the é-future enjoys limited productivity. In the past, the opposition between unaugmented preterites and augmented perfects is given up in favour of the latter, which become a general past. *Ro* ousts all other augments and eventually becomes a mere past tense particle. From instances with a petrified neuter infixed pronoun, *ro*, like the negative particle *ní*, acquires an obligatory leniting effect.

Verbal inflection is further unified and the intricacies of the system drastically reduced by a gradual elimination of compound verbs. On the basis of either the dependent stem variant or the verbal noun, new simple verbs are created. Old deuterotonic verbal forms disappear from the language.

The loss of the distinct quality of final vowels does not have such profound effects in verbal morphology as in other sectors of the grammar, but in a limited number of personal endings, distinctions between persons are erased. This leads to the introduction of a number of new endings: 3 sg. present conjunct *-a/enn*; 1 pl. absolute *-mait*; 1 sg. future conjunct *-a/et*. In the s-preterite plural the endings of the suffixless preterite are introduced. Across the board, there is a tendency towards a uniform inflection for all verbs.

The entirely deviant inflection of the copula is restructured by making the 3 sg. the basis to which personal endings similar to suffixed pronouns are added.

As for relative marking, nasalizing relative constructions are replaced by leniting ones. Only the 3 sg. in *-a/es* remains of the separate relative verbal forms, and the petrified class C neuter infixed pronoun can be used as a relative marker.

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