Danish, a Scandinavian (North Germanic) language, is spoken by about 5.5 million people in Denmark and by minorities in Schleswig (Northern Germany). It is also used as a second language in Greenland and the Faroe Islands. In its phonology, Danish is like the other Scandinavian languages a two accent language, the two word tones of Swedish and Norwegian correspond to presence and absence of a glottal catch (the so called *stød*). A rather simple consonantal system is supplemented by an extraordinary rich array of vowels. The morphology is like that of the other Scandinavian languages relatively simple: no inflection for case, no inflection for person in the verb, and only two verb tenses, present and preterite, but contrary to both English and German there is an inflectional passive.

This morphological simplicity is however compensated for syntactically by an extended use of prepositions in the transitivity system, and a heavy reliance on prosody, and especially morpheme and word order, both within the phrase and within the clause, so that Danish grammarians tend to view the *topology* as an independent semiotic level and indeed the basic organisational principle of Danish syntax. Major focuses will therefore be on topics such as transitivity and word order.

Michael Herslund, dr.phil., Professor of French Linguistics, Faculty of Modern Languages, Copenhagen Business School.

ISBN 3 89586 396 3



# Danish

Michael Herslund

Languages of the World/Materials 382 LINCOM EUROPA

# Danish

Michael Herslund

Languages of the World/Materials 382

2002 LINCOM EUROPA

## Published by LINCOM EUROPA 2002

All correspondence concerning Languages of the World/Materials should be addressed to:

LINCOM EUROPA Freibadstr. 3 D-81543 Muenchen

LINCOM.EUROPA@t-online.de
http://home.t-online.de/home/LINCOM.EUROPA
www.lincom-europa.com

FAX +49 89 6226 9404

All rights reserved, including the rights of translation into any foreign language. No part of this book may be reproduced in any way without the permission of the publisher.

Edited by Ulrich J. Lüders

Printed in E.C.

Printed on chlorine-free paper

Die Deutsche Bibliothek - CIP Cataloguing-in-Publication-Data

A catalogue record for this publication is available from Die Deutsche Bibliothek (http://www.ddb.de)

ISBN 3 89586 396 3

#### Preface

The present outline of the grammar of Modern Danish is conceived as an all-round description of the phonology, morphology and syntax of the contemporary language from a functional and typological perspective. The purpose has been to emphasise the principal characteristics, the underlying simplicity of design and the regularities of the language, and to offer a concise, yet detailed description of the structure of Danish, which looked at from the surface may seem extremely complicated, not the least in its phonology.

The work relies heavily on numerous predecessors, mostly written in Danish and thus not immediately accessible to an international public. Most of these works are mentioned in the bibliography, I hope, but some lacunae are inevitable and I ask for forgiveness for such omissions. A number of people have helped by reading and commenting the manuscript. I thank Hans Basbøll, Niels Davidsen-Nielsen, Nina Grønnum and Lars Heltoft for invaluable assistance and advice. Needless to say that they do not necessarily agree with me on all details - in fact I know that they do not - but that is what scientific discussion is about. It should also be redundant to state that they are in no way responsible for remaining flaws and errors in the text.

Copenhagen, December 2001

Michael Herslund

## Contents

0. In	troduction	1
	Major historical divisions	1
	Dialectal divisions	2
	The description of Danish	3
1. Ph	onology	4
1.1.	Vowels	4
	1.1.1. Tense and Lax, Long and Short Vowels	4
	1.1.2. The Schwa	8
1.2.	Consonants	9
	1.2.1. Strong and Weak Consonants	9
	1.2.2. Lenition	10
1.3.	Diphthongs	15
1.4.	Suprasegmentals	17
	1.4.1. Word Structure	17
	1.4.2. Stress	18
	1.4.3. The Two Accents	20
	1.4.3.1. Stød assignment	21
	1.4.3.2. Morphology and the two accents	23
	1.4.3.3. Interpretation of the stød	27
	1.4.4. Intonation	28
2. Mo	orphology	31
	Morphemes, morphs and paradigms	31
	Word structure, inflection, derivation and compounding	33
2.1.	Nominal Morphology	34
	2.1.1. The Noun	34
	2.1.1.1. Number	35
	Umlaut	36
	Syncope	37
	2.1.1.2. Gender and noun classes	37
	Countable and uncountable: individuation	38
	Personal gender	40
	2.1.1.3. Definiteness	40
	Indefinite	42
	Definite	42
	2.1.1.4. Case: the genitive	44
	2.1.1.5. Possession	47

2.1.2. Pronouns	47
2.1.2. Personal pronouns	48
2.1.2.2. Possessive pronouns	49
2.1.2.3. Demonstrative pronouns	51
2.1.2.4. Interrogative pronouns	52
2.1.2.5. Indefinite pronouns	53
2.1.2.6. Quantitative pronouns	54
2.1.3. Numerals	56
2.1.4. The Adjective	57
2.1.4.1. Agreement	57
2.1.4.2. Comparison	59
2.1.4.3. Adverbs	60
2.1.4.4. Spatial adverbs	60
2.1.5. The Noun Phrase	62
2.2. Verbal Morphology	63
2.2.1. The Verb	63
2.2.1.1. Personal affixes	64
2.2.1.2. The TAM-system	65
Mood	65
Tense	66
The infinitive	68
Modal content of the tense category	69
The perfect	70
Modal verbs	71
2.2.2. Voice	72
The passive	72
The middle	74
The causative	75
2.2.3. Verbal Modifiers	76
Converbs	76
Serial verbs	77
Centaurs	77
3. Syntax	79
3.1. Sentence Types and Grammatical relations	80
3.1.1. Copular Clauses and Predicative Complements	81
3.1.2. Intransitive Clauses: Unaccusative and Unergative	82
3.1.3. Transitive Clauses: Simple and Ditransitive	83
3.1.4. Transitivity Alternations	84
Prepositional constructions: the antipassive	85
Incorporation	87

	The applicative cons	truction	87
	Prefixation		89
	Postverbal particle co	onstructions: suffixation	89
	3.1.5. Demoted Grammatical Relations		91
	Co-subject and co-ob	oject	91
	Formal subject and o	object	92
	The presentational co	onstruction	92
	3.1.6. Voice		93
	Passive		93
	Middle		94
3.2.	. The Simple Sentence		95
	3.2.1. Constituent Order: Topology of the	Clause	95
	Elaboration of the slo	ots	99
	Preposition stranding		100
	Light constituents		100
	3.2.2. Topology of Subordinate Clauses		101
	Clause intertwining		102
	Summing up		103
3.3.	. Complex Sentences		103
	3.3.1. Coordination		103
	3.3.2. Subordination		105
	Explicative clauses		105
	Implicative clauses		106
	Operator clauses		107
	Non-finite clauses		108
3.4.	. Discourse Phenomena		109
	3.4.1. Anaphora		109
	3.4.2. Theme-Rheme, Topic-Focus		111
	3.4.3. Connectors and Discourse Particles		113
4. Sa	Sample Texts		115
Bibli	liography		117

#### 0. INTRODUCTION

Danish, the national language of Denmark, is spoken by approximately 5.5 million people in the actual kingdom of Denmark, by minority groups in Schleswig, Northern Germany (about 50,000), and by emigrant groups in the Americas and Australia. It is also the second language in Greenland, the Faroe Islands, and, at least until recently, in Iceland.

#### Major historical divisions

Common Nordic (Dan. urnordisk) 200-800

Like Swedish, Norwegian, Faroese and Icelandic, Danish belongs to the Nordic branch of Germanic. The language is attested in runic inscriptions going back at least to the fourth Century A.D., most noticeably the inscription of the small golden horn from around 400:

ek hlewagastiR holtijaR horna tawido[Mod. Da. 'Jeg lægæst fra Holt (?) gjorde hornet']'I sheltered guest from Holt (?) the horn made'

The exact meaning, especially of the word *holtijaR*, is unclear: does it mean 'from Holt', 'the son of Holt' or 'from the forest' as an attributive to the noun *hlewagastiR*, or is it a genitive governed by this noun, i.e. 'Holt's guest'?

Early Danish (Dan. olddansk) 800-1100

A dialectal division of the Nordic languages, which until at least 1000 were more or less the same language, known as 'the Danish tongue', begins noticeably as a split between East Nordic (Danish and Swedish) and West Nordic (Norwegian), but the languages are still sensibly the same. The first long Danish text with a historical content is the runic inscription of Jellinge from about 980, which can be regarded as the "birth certificate" of the Danish nation, the first written attestation of the existence of a centralised royal power:

haraltr kunukR bab kaurna kubl þausi aft kurm fabur sin auk aft þaurui mubur sina sa haraltr ias sar uan tanmaurk ala auk nuruiak auk tani karþi kristna [Mod. Dan. 'Harald konge lod gøre denne høj efter sin fader Gorm og efter sin moder Thyra, den Harald som vandt sig hele Danmark og Norge og gjorde danerne kristne'] 'Harald king let make this mound after Gorm his father and Thyra his mother that Harald who won for himself all of Denmark and Norway and made the Danes christian'

Old Danish (Dan. gammeldansk) 1100-1525

In this period the dialectal split between the Nordic languages has been consummated, a split which is deepened by certain radical phonetic developments in Danish. The period can be subdivided into two: Early Old or Middle Danish, 1100-1350, and Late Old or Middle Danish,

1350-1525. There are virtually no written records in Danish from about 1050 to about 1250, but from about 1300 Danish possesses an uninterrupted written tradition in manuscripts written with the Latin alphabet, only exceptionally in runic script. The major linguistic monuments from this period are the three law collections corresponding to the three major areas of the realm, Scania, Zealand and Jutland: the Scanic law, the Zealandic law, and the Jutlandic law issued by king Valdemar II in 1241. The opening lines of the latter run as follows:

Mæth logh skal land bygiæs. æn wildæ hwær man oruæs at sit eghæt. oc latæ mæn nytæ iafnæth tha thurftæ man ækki logh with. æn ængi logh ær æmgoth at fylghæ som sannænd. Hwaræ sum man æuær um sannænd. thær skal logh letæ hwilkt ræt ær. [Mod. Dan. 'Med lov skal land bygges; men ville hver mand nøjes med sit eget og lade mænd nyde samme ret, da havde man ikke lov behov. Men ingen lov er jævngod at følge som sandhed. Hvor man tvivler om sandheden, der skal loven udlede hvad ret er']

'The country shall be governed by law; if, however, everyone would be content with his own and let others enjoy the same right, then no law was needed. But no law is as good to abide by as the truth. Where one is doubtful about the truth, the law shall guide the search for justice'

Towards the end of the period attempts at standardisation of the written language are clear. This is also a period where the language is heavily influenced by Low German.

## Modern Danish (Dan. nydansk) 1525-

Since the first translation in 1550 of the Bible after the Reformation of 1536, the language has been increasingly standardised, the basic outlines of the modern standard being laid out in the 18th and 19th Centuries. From about 1700 Danish emerges as a full-fledged European literary language with a reasonably uniform orthographic standard. The orthography of contemporary Danish, which retains many archaic features, is thoroughly morphophonemic and etymological.

## Dialectal divisions

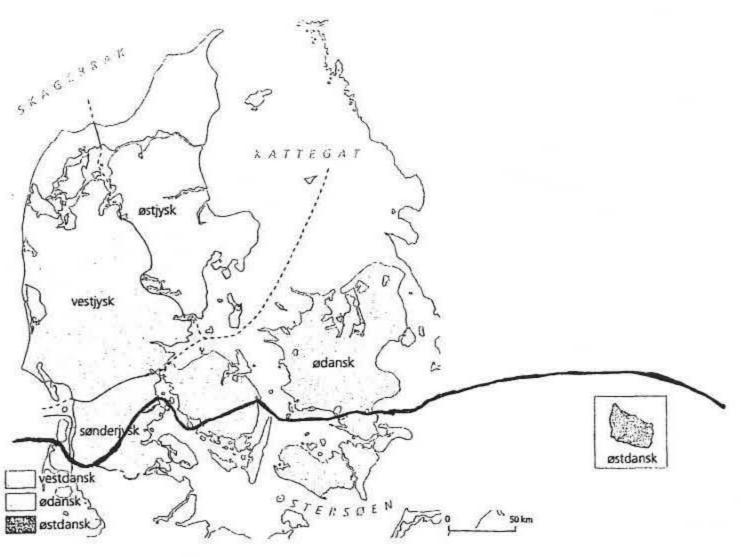
Danish is a rather homogeneous speech community with a thoroughly standardised written language and only few regional and/or social differences. Dialectal differentiation has been progressively levelled in the 19th and 20th Centuries. Most people nowadays speak either the neutral standard language or a regional variety of it.

The old dialects which survive only nowadays as regional colourings of the common language, follow the major geographical divisions of the country and are traditionally divided into three groups: West Danish in the peninsula of Jutland (Jylland), Insular Danish in the major islands of Funen (Fyn) and Zealand (Sjælland) with the minor islands of Møn, Falster and Lolland, and in the isolated island of Bornholm in the Baltic the last representative of East Danish, formerly spoken in the now Swedish provinces of Scania (Skåne), Halland and

Introduction

3

Blekinge. The smaller islands belong to one of the three major geographical areas, Jutland, Funen and Zealand, according to geography and history. Cutting accross the dialectal areas is a line running east - west in the southern part of the country, which subdivides all Danish dialects (map from *Den store danske Encyklopædi*):



North of the line the Nordic distinction between two kinds of accented syllables is realised by the presence vs. absence of the so-called *stød* (a glottal catch), south of the line the dialects either do not retain the opposition, or the opposition is realised as a tonal opposition. This line, Danish *stødgrænsen* 'the glottal catch border', is the Southern frontier of the common Nordic two accent distinction. A similar line is found in the extreme North of Norway and Sweden, where the dialects similarly do not distinguish two accents.

## The description of Danish

Danish has at least since the Reformation been the concern of grammarians and lexicographers. In the Sixteenth Century there is the thorough description of the spoken language by Jacob Madsen Aarhus, De Litteris Libri Duo, and in the Eighteenth the comprehensive grammars by Jens Pedersen Høysgaard, Accentuered og Raisonnered Grammatica (1747) and Methodisk Forsøg til en fuldstændig dansk Syntax (1752), see Bertelsen (1979). In the Nineteenth Century the center of interest was of course the comparative Indo-European studies, but the Twentieth saw a regain of interest in the synchronic description of Danish with names like Wiwel (1901), Mikkelsen (1911), Aa. Hansen (1967) and several others. The most influential single work of the 20th Century is Diderichsen (1946). Major comprehensive descriptions of Danish are Skautrup (1942-53), Aa. Hansen (1967), Brink et al. (1991), and the forthcoming grammar by E. Hansen and L. Heltoft, Grammatik over det danske sprog, which is a major source of inspiration for the present work.

## 1. PHONOLOGY

#### 1.1. Vowels

The Danish vowel system is rich and complex. The many different surface manifestations can however be derived from 10 underlying vowel phonemes (cf. Grønnum 1998a, b). On the high-low dimension there are four degrees. A series of rounded front vowels duplicates the unrounded:

	Fron	it		Back
High	i	у		u
8	e	Ø	$\partial$	O
	ε	œ		)
Low			a	

These 10 underlying vowels (not counting the schwa, [∂]) are realised by about 30 to 40 short and long, plain and laryngealised variants. The vowel [3] is a somewhat centralised, rounded back vowel<sup>1</sup>. These underlying vowels are illustrated by the following long vowels:

```
mule [mu:l∂] 'muzzle'
                         kyle [ky:l∂] 'throw'
mile [mi:l∂] 'miles'
                                                  mole [mo:l∂] 'pier'
                         køle [kø:l∂] 'cool (v)'
mele [me:l∂] 'flour (v)'
                                                  måle [mɔ:l∂] 'measure (v)'
                         høne [hœ:n∂] 'hen'
mæle [mɛ:l∂] 'voice'
                                  male [mæ:l∂] 'paint (v)'
```

The subtle interplay of the surface vowel variants is determined by an underlying opposition between tense and lax vowels within the high vowels, and by the surrounding consonants.

## 1.1.1. Tense and Lax, Long and Short Vowels

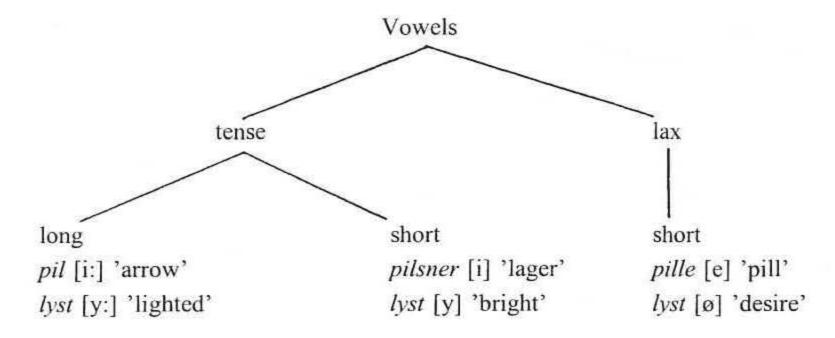
Some Danish phoneticians regard all surface contrasting vowels as separate phonemes on the basis of minimal or quasi-minimal pairs of short vowels like the following:

lidt [lid] 'suffered'	lidt [led] 'a little'
nys [nys] 'recently'	kys [køs] 'kiss'
byg [byg] 'barley'	ryg [ræg] 'back'
bygge [byg∂] 'build'	brygge [brœg∂] 'brew'
bus [bus] 'bus'	buk [bog] 'bow'

Phonology

bund [bon']2 'bottom' busk [busg] 'bush' kunde [kon∂] 'client' kunne [kun∂] 'can (v)'

But in order to understand the phonology and orthography of Danish, it is practical to assume an underlying tense/lax opposition within the high vowels, from which are derived their different realisations. When tense, vowels are either long or short, the lax vowels being always short:



This assumption is supported by historical and comparative evidence: Danish [e] of e.g. fisk corresponds to the lax [1] of Eng. fish, Germ. Fisch and Dutch vis. The relation between orthography, morphophonemics and phonetics can be illustrated by the following table of high unrounded front vowels:

Orthography	ris	pisk	fisk	frisk
Morphophonemics	ri:s	pisk	fisk	frisk
Phonetics	[ri's]	[pisg]	[fesg]	[fresg]
	'rice'	'whip'	'fish'	'fresh'

As can be seen from the first example, a long vowel may be realised with a stød (noted by [']) instead of plain length, i.e. V: = V', see 1.4.3. below. And in the last example the lax vowel is lowered an extra degree in the neighbourhood of uvular or pharyngeal [r].

The same pattern kan be observed with high rounded front and back vowels:

Orthography	lyst	lyst	lyst	ryst
Morphophonemics	ly:s-t	lys-t	lyst	rYst
Phonetics	[ly'sd]	[lysd]	[løsd]	[rœsd]
	'lighted'	'bright'	'desire'	'shake'

<sup>&</sup>lt;sup>1</sup> The letter a, which represents this sound, is etymologically a long a and the orthography retained the spelling aa until the reform of 1948, a spelling still used in family and place names, viz. Kierkegaard, Aalborg, etc.

<sup>&</sup>lt;sup>2</sup> The ['] indicates the laryngealisation characteristic of the glottal catch ("stød"), see 1.4.3. below.

Orthography	gul	guld	gulv
Morphophonemics	gu:l	gul	gUlv
Phonetics	[gu'l]	[gul]	$[g \supset l]^3$
A MUMETER	'vellow'	'gold'	'floor'

As can be gathered from these examples, Danish realises the common Germanic tense-lax opposition by lowering underlying high lax vowels:

```
I \rightarrow e, \quad Y \rightarrow \emptyset, \quad U \rightarrow D
```

In the presence of uvular or pharyngeal [r], these vowels, except [3], are further lowered one degree:

 $e \rightarrow \varepsilon$ ,  $\omega \rightarrow \omega$ 

The tense-lax distinction is with the other vowels replaced by a simple long/short opposition. The low vowel /a/ and the back vowel /> for instance pattern like this:

Long	Short	
hane [hæ:n∂] 'cock'	Hanne [han∂] 'Hanne (name)'	hakke [hαg∂] 'pickaxe'
håne [hɔ:n∂] 'mock'	(til) hånde [h∧n∂] '(lend a) han	d'

The long version of the phoneme /a/ is realised as  $[\mathfrak{X}]$  whereas the short versions are realised as a short  $[\mathfrak{A}]$  or  $[\mathfrak{A}]$  depending on the surrounding consonants. The distinction between the long variant  $[\mathfrak{X}]$  and the short  $[\mathfrak{A}]$  as in made  $[\mathfrak{M}\mathfrak{X}]$  'feed' vs. mad  $[\mathfrak{M}\mathfrak{A}]$  'food' is in the contemporary language however being increasingly levelled in favour of the  $[\mathfrak{X}]$  variant, i.e. mad  $[\mathfrak{M}\mathfrak{X}]$ . The long  $\mathfrak{I}$  is realised as  $[\mathfrak{I}]$ , the short versions as  $[\mathfrak{I}]$ . In words with long  $[\mathfrak{X}]$  or  $[\mathfrak{I}]$ , the vowel is shortened in some inflected or derived forms, and as the first component of a compound. The same lexeme thus exhibits an alternation between  $[\mathfrak{X}]$  and  $[\mathfrak{A}]$ , or between  $[\mathfrak{I}]$  and  $[\mathfrak{I}]$ :

```
bage [bæ:j∂] 'bake' - bagværk [bαwvε'g] 'pastry'

flag [flæ'j] 'flag' - flagstang [flαwsdaɪ]']<sup>4</sup> 'flag pole'

stål [sdɔ'l] 'steel' - ståltråd [sd∧ltrɔ'ð] 'steel wire'

blå [blɔ'] 'blue' - blåmejse [bl∧majs∂] 'blue tit'
```

Phonology

```
råd [rɔ'ð] 'council'-rådhus [r∧ðhu's] 'city hall'på [pɔ'] 'on'-påtænke [p∧tɛɪj'g∂] 'consider'
```

As suggested by the orthography and following the analysis of Grønnum (1998b:220 ff.), the different a-sounds, [æ], [a] and [α], are variants of a single underlying /a/. The variation among the a-vowels can be summed up by the following realisations of the letter 'a':

Long	Short	Short before grave C
kane [kæ:n∂] 'sleigh'	kande [kan∂] 'jug'	kakkel [kag∂l] 'tile'
kage [kæ:j∂] 'cake'	kasse [kas∂] 'box'	kaffe [kαf∂] 'coffee'
klase [klæ:s∂] 'cluster	klasse [klas∂] 'class'	klamme [klam∂] 'brace
kapre [kæ:br∂] 'seize'	kalde [kal∂] 'call'	kappe [kαb∂] 'cloak'
lade [læ:ð∂] 'let'	ladt [lad] 'loaded'	lam [lam'] 'lamb'
las [læ's] 'rag'	land [lan'] 'country'	lang [latj'] 'long'
lad [læ'ð] 'indolent'	lad [lað] 'truck body'	lak [lag] 'lacquer'

The open posterior  $[\alpha]$  occurs as the realisation of the short a before a grave (labial or velar) consonant or as the realisation of 'ar', cf. karm  $[k\alpha'm]$  '(window) frame' and 1.2.2. below. It is also the variant found after syllable initial r:

```
ral [rαl] 'pebble' rat [rαd] 'steering wheel' rad [rαδ] 'row'
```

The full picture of the non-high vowels is then the following:

	Long	Short
/e/:	e:	e
/ <b>ɛ</b> /:	ε:	$\varepsilon$
/ø/:	ø:	Ø
/œ/:	œ:	œ
/a/:	æ:	a - α
/å/:	<b>)</b> :	^
/o/:	0:	0

All the short variants are further lowered in the vicinity of [r], but these variants will not be specially noted. The length of the long vowels protect these from the influence of following consonants.

The orthography does not distinguish tense from lax (high) vowels, but the distinction between long and short vowel is signalled by a following simple consonant vs. a double consonant or a consonant cluster, e.g.:

<sup>&</sup>lt;sup>3</sup> The final 'v' of this example is normally silent, but it can reappear when a vocalic ending is added, viz. gulvet [gɔlv∂ð] 'the floor'.

<sup>&</sup>lt;sup>4</sup> The alternation between [j] and [w] in these examples is determined by the preceding vowel, as will be explicated in 1.2.2. below.

Long, tense - [y:]:	krybe, hyle, kyse, syn 'crawl, howl, bonnet, sight'
	krybbe, hylde, dysse, sysle 'crib, shelf, cairn, be occupied'
Short, tense - [y]:	dyppe, spytte, kysse, synd 'dip, spit, kiss, sin'
Short, lax - [ø]:	ayppe, spytte, kysse, synte dip, sp

And orthographically distinct words may thus be perfectly homonymous:

```
ryst 'shake' - røst 'voice': [røsd] - lykke 'happiness' - løkke 'loop': [løg∂]
```

## 1.1.2. The Schwa

Final written -e indicates, unless it is stressed, a weakened, lax central vowel  $[\partial]$ :

huse 'houses' [hu:s∂]	sluse 'sluice' [slu:s∂]
tygge 'chew' [tyg∂]	fodre 'feed' [foðr∂]

The historical neutralisation and weakening of final vowels is one of the main features which distinguish Danish from cognate Swedish:

Danish	Swedish			
fine [fi:n∂]	fina [fi:na]	'nice-PL'		
skole [sgo:l∂]	skola [sku:la]	'school'		
vaser [væ:s^]	vasor [va:sor]	'vases'		
morgen [m∧w∂n]	morgon [m∧ron]	'morning'		

The realisation of final schwa is phonetically very variable. In many instances, noticeably after high vowels and after the deletion of a homorganic semi-vowel, the schwa is realised as a very short copy of the stressed vowel so that the result is rather just a long stressed vowel:

```
'week'
          [u:w\partial] [u:^u]
                                        'smoke'
          [ry:j∂] [ry:<sup>y</sup>]
                                        'girl'
pige [pi:j∂] [pi:¹] [pi:]
```

Before a sonorant posttonic schwa is most often realised by the sonorant becoming syllabic, so-called schwa assimilation ( $\partial Son \rightarrow Son_{syll}$ ). This assimilation seems to be compulsory word-finally (cf. Basbøll 1998:44 ff.):

In absolutely final position the schwa is retained as a vocalic sound, or a preceding sonorant

Phonology 9

may become syllabic in the standard language, cf. hjemme [jɛmm] 'at home', but in several regional variants it may be apocopated:

	Standard	Jutland	
sladrede	[∃slaðr∂ð∂]	[¹slaðr∂ð]	'gossiped'
skole	[ˈsgo:l∂], [ˈsgo:l]	[   sgo:l]	'school'

Also word-internal vowels may be reduced to schwa or syncopated whereby a sonorant consonant again may become syllabic:

politik	[poli   tig]	[pol∂   tig]	[pol   tig]	'politics'
* CONTROL STATE OF THE STATE OF	[]	21		Encontraction and an arrangement

#### 1.2. Consonants

In comparison with the vowel system the consonantal system is relatively simple. The underlying opposition is between strong and weak consonants. This distinction is however not identical to the phonetic distinction between fortis and lenis: all Danish consonants are in fact realised as lenis consonants. It is rather an abstract distinction like the tense-lax distinction in the high vowels, from which most contrasts and alternations can be understood. And one could argue that the underlying distinction is one of voice, cf. Grønnum (1998b:287). Voice distinctions play, however, only a minor role in surface structure, since the only pair of consonants distinguished by voice are [v], voiced, vs. [f], unvoiced. But voiced variants of the weak consonants occur, especially between vowels.

#### 1.2.1. Strong and Weak Consonants

The stops are paired, with a strong, aspirate, and a weak, plain consonant. The sonorants, i.e. nasals, liquids and semi-vowels, are weak and normally voiced consonants, as in many other languages:

	Labial	Alveolar	PalVelar	Uvular	Glottal
Stop	p b	t d	k g		
Fricative	f v	S			h
Nasal	m	n		,	
Liquid		1		r	
Semi-vowel			j w		

Other consonants occur in the phonetic surface. The phoneme /s/, for instance, combines with a following /j/ into an alveopalatal fricative [ş], an unrounded [s] sound (cf. Grønnum 1998b:264 ff.): sjal [şæ'l] 'shawl', sjæl [şɛ'l] 'soul'. The velar nasal [ $\eta$ ] is best analysed as an underlying /ng/ cluster, since it in several respects behaves like a cluster (cf. Grønnum 1998b:266 ff.):

- monosyllabic words with final [7] always carry stød, which indicates that the final segment is a cluster, cf. 1.4.3.1. below: ting [tet]'] 'thing'5.
- the vowel preceding [1] is always short, which also indicates a following long segment.
- [1] never occurs after a consonant or a diphthong.

The assumed underlying ng thus has the same distribution as the cluster nd: in both cases the final weak consonant disappears, see the following section.

The strong stops /p, t, k/, which are phonetically aspirated lenis consonants, the aspiration being realised as an affrication in the case of /t/, viz. [ts], only occur syllableinitially before a (liquid followed by a) full vowel. In all other positions the opposition strongweak is neutralised in favour of the weak stop:

a.	pas [pas] 'passport'	bas [bas] 'base'
	tag [tæ'j] 'roof'	dag [dæ'j] 'day'
	nitrat [ni   tra'd] 'nitrate'	hydrat [hy   dra'd] 'hydrate'
	betro [be tro'] 'confide'	bedrog [be dro'] 'cheeted'
	kane [ kæ:n∂] 'sleigh'	gane [¹gæ:n∂] 'palate'
b.	palads [pa   las] 'palace'	ballet [ba   led] 'ballet'
U.	tapet [ta   ped] 'wall paper'	dater [da   ter] 'date (v)'
	kalot [ka   l\d] 'calotte'	galoche [ga l∧ș∂] 'galosh'
c.	lap [lab] 'patch'	lab [lαb] 'paw'
0.	bolt [b∧ld] 'bolt'	bold [b^ld] 'ball'
	ryk [rœg] 'draw'	ryg [ræg] 'back'
	tryk [træg] 'print'	tryg [træg] 'secure'

Also after [s] is the opposition neutralised in favour of the weak consonant, whether a full vowel follows or not:

```
spor [sbo'r] 'trace'6
spændt [sbɛn'd] 'tense'
                                  stor [sdo''] 'big'
stemt [sdɛm'd] 'voiced'
                                  skov [sg∧w'] 'forest'
skæmt [sgem'd] 'joke'
```

## 1.2.2. Lenition

A general and characteristic feature of the Danish consonant system is the systematic lenition of consonants in syllable-final position. This is particularly conspicuous between vowels where the weak consonant d is realised as  $[\delta]$ , b and v as [w] ([b] however optionally, depending Phonology 11

on speed and register), /g/ as [j] or [w] depending on the preceding vowel being front or back7:

```
[fø:ð∂] 'feed'
føde
         [lø:b/w∂] 'run'
løbe
        [lø:w∂] 'lion'
løve
         [sø:j∂] 'seek'
søge
        [bæ:j∂] 'bake'
bage
        [dra:w∂] 'kite'
drage
```

Contrasts between intervocalic non-lenited strong and lenited weak consonants are illustrated in the following table:

Orthography	bitte	bide	matte	made
Morphophonemics	bit∂	bi:d-∂	$\operatorname{mat-}\!\partial$	ma:d-∂
Phonetics	bid∂	bi:ð∂	$mad\partial$	mæ:ð∂
	'tiny'	'bite'	'weak-PL'	'feed'

Also finally such contrasts occur:

Orthography	rat	rad	vådt	vod
Morphophonemics	rat	rad	vɔ:d-t	v∍d
Phonetics	rad	rαð	v∧d	v∧ð
	'steering wheel'	'row'	'wet'	'dragnet'

In different inflected and derived forms of the same word, surface contrasts between a syllable-final lenited and an apparently non-lenited consonant occur, especially as the result of a following t-ending (neuter of adjectives, -t, or the preterite ending, -te):

Orthography	våd	våd-t	mød-e	mød-te
Morphophonemics	v>:d	v>:d-t	mø:d-e	mø:d-te
Phonetics	vo'ð	v∧d	mø:ð∂	mød∂
	'wet-COM'	'wet-NEU'	'meet'	'met'

Such contrasts may actually be taken as an argument that the final neutralisation of stops really is a case of consonant gradation whereby all consonants are weakened in syllable-final position: strong aspirated stops are realised as the corresponding weak unaspirated stops, weak unaspirated stops as the corresponding approximants or semi-vowels. This final gradation can

 $<sup>^5</sup>$  Exceptions are e.g. onomatopoietic words like bang [baŋ] 'bang'.

<sup>&</sup>lt;sup>6</sup> The reduced realisation of final -r is represented by [...<sup>1</sup>], see 1.2.2.

<sup>&</sup>lt;sup>7</sup> The semi-vowels are the modern reflexes of earlier [ $\gamma$ ].

then be represented by the following table (cf. Grønnum 1998b:275 ff.):

Strong Stop		Weak Stop		E 90	
	$\rightarrow$	-b	-b	$\rightarrow$	-b/-w (lenition optional)
-p -t	$\rightarrow$	-d	-d	$\rightarrow$	-ð
-k	$\rightarrow$	-g	-g	$\rightarrow$	-j/-w

The letter 'd' is often used as a "silent" consonant in combinations with 'n', 'l' and 'r'. One can, however, assume underlying status for final lenited /d/ which drops after a sonorant consonant:

Orthography	mand	hård	skyld
Morphophonemics	mand	hård	skyld
Phonetics	man'	h^'r	sgyl'
Filonetics	'man'	'hard'	'guilt'

The reasons for assuming underlying status for the silent 'd' in such cases are the following. First and foremost a [d] appears in the following words when an inflectional or derivational ending is added. The simplest analysis requires this consonant to be the underlying /d/ which reappears prevocalically in derived forms, cf.:

mord [mo'r] 'murder'	-	morder [mord ] 'murderer
nord [no'r] 'north'	-	nordisk [nordisg] 'nordic'
hård [h∧' <sup>r</sup> ] 'hard'	(5)	hærde [hε¹d∂] 'harden'
ynde [øn∂] 'grace'	<del></del>	yndig [øndi] 'lovely'
mand [man'] 'man'	_	mandig [mandi] 'manly'
fuld [ful'] 'full'	-	fyldig [fyldi] 'buxom'
skyld [sgyl'] 'guilt'	-	skyldig [sgyldi] 'guilty'
alder [al'^] 'age'	-	ældre [ɛldr∂] 'elderly'

The second reason for assuming phonological status for the silent 'd' is the fact that the description of stød assignment is simplified if it is assumed that the words of the left hand column have a final long consonant, a long consonant resulting from the coalescence of the sonorant and final /-d/: stød is then uniquely assigned to long vowels or long consonants, see 1.4.3. below. This, for instance, accounts for the variation in the following cases between the common gender and the neuter of adjectives such as  $v \mathring{a} d$  'wet' and s @ d 'sweet':

Orthography	våd	vådt	sød	sødt
	və:d	v∋:d-t	sø:d	sø:d-t
Morphophonemics	v J.u	78 PORT (1987)	-	sø:tt
Assimilation	~	vo:tt		A CONTRACTOR OF THE PARTY OF TH

Phonology 13

Lenition	v∋:ð	v∋:dd	sø:ð	sø:dd
Vowel shortening	Ħ.	v∧dd	3 <del>50</del> 0	sødd
C-Simplification		v∧d	(4)	sød
Stød Assignment	vo'ð		sø'ð	5

The reason why the neuter forms vådt and sødt are stød-less is that their vowel has been shortened before the underlying cluster, and the combination of a short vowel followed by an unvoiced consonant is unable to carry the stød, cf. 1.4.3.1. below.

The same kind of reasoning as for 'nd' can be used in favour of the analysis of  $[t_j]$  as underlying /ng/: the /-g/ is dropped syllable-finally, but a /-k/ following the  $[t_j]$  is realised as a [g] before which /n/ is realised as  $[t_j]$ . This is illustrated by the following minimal pair:

Orthography	tang 'seaweed'	tank 'tank'
Morphophonemics	tang	tank
Velarisation	tarjg	tarjk
Lenition	tarj	tarjg
Stød Assignment	tan,	taŋ'g

The underlying /-g/ may, as "silent" 'd', reappear in derived forms:

```
diftong [dif | t∧t]] 'diphthong' - diftongere [dift∧t] | ge't∂] 'diphthongise'

Peking [ | peket]] 'Beijing' - pekingeser [peket] | ge's∧] 'Pekingese'
```

The final consonant combination 'nd' is thus paralleled by 'ng': in both cases the digraph signals a single consonant, [n] or [1]], which realises an underlying cluster. The addition of the corresponding strong homorganic consonant letter 't' (viz. 'ndt') or 'k' (viz. 'nk', where 'g' is graphically dropped) signals the realisation of a final stop:

```
'nd' \rightarrow [n'] 'ndt' \rightarrow [n'd] 
bund [bon'] 'bottom' bundt [bon'd] 'bundle' 
'ng' \rightarrow [1]'] 'nk' \rightarrow [1]'g] 
tang [tat]'] 'seaweed' tank [tat]'g] 'tank'
```

Exceptions to this rule are e.g. blond [bl $\land$ n'd] 'blond', bold [b $\land$ l'd] 'ball', runde [r $\ni$ nd $\partial$ ] 'round (n)', which retain final d. On the other hand, graphic -t is lenited finally in schwa syllables:

```
huset [hu:s∂ð] 'hus-DEF' skrevet [sgrε:w∂ð] 'written'
```

Lenition is another general feature which distinguishes Danish from Swedish:

Danish	Swedish
købe [kø:b/w∂]	köpa [çø:pa] 'buy'
vide [vi:ð∂]	veta [ve:ta] 'know'
lige [li:j∂]	like [li:ke] 'straight'

Lenited consonants may eventually drop altogether or be absorbed by a preceding high vowel, the final schwa being realised as a short copy of the stressed vowel, cf. 1.1.2. above:

The lenition of weak consonants is opposed to their retention before another consonant so that the consonant gradation occurs as a morphophonemic alternation:

/b/:	[b/w]	[b]
AMILE.	købe [kø:b/w∂] 'buy'	købt [købd] 'bought'
/d/:	[ð]	[d]
,	hvid [vi'ð] 'white-COM'	hvidt [vid] 'white-NEU'
/g/:	[j]	[g]
16.	søge 'seek' [sø:j∂]	søgt [søgd] 'sought'

Consonant lenition also extends to /r/ which is practically only realised consonantically as a uvular or pharyngeal constriction, phonetically [в], before a stressed vowel word-initially:

In all other positions it merges more or less with a preceding vowel which is accordingly opened and/or retracted:

far [f
$$\alpha$$
:] 'father' perle [p $\epsilon$ 'l $\partial$ ] 'pearl'

Noticeably so in the sequence  $-er /-\partial r/$ , which is realised as [ $\land$ ]:

```
maskiner [mæ | sgi:n∧] 'machines' læser [lε's∧] 'reads'
```

Phonetically, then, the singular/plural and the infinitive/present indicative opposition, both -e vs. -er, are realised as a vocalic opposition between [ $\partial$ ] and [ $\wedge$ ]:

```
maskine[mæ | sgi:n\partial]-maskine-r[mæ | sgi:n\wedge]læse[ | lɛ:s\partial]-læse-r[ | lɛ's\wedge]
```

Phonology 15

But the underlying presence of an /r/ is revealed in derived word forms where the /r/ becomes syllable-initial:

```
      morder [mo<sup>r</sup>d∧] 'murderer'
      morderisk [ | mo<sup>r</sup>d∂risg] 'murderous'

      guitar [gitα'] 'guitar'
      guitarist [gitα | risd] 'guitarist'

      motor [mot∧] 'motor'
      motorisere [motori | se'<sup>r</sup>∂] 'motorise'
```

The phoneme /r/ is thus realised syllable-initially as a consonant, syllable-finally as a glide which either merges with the preceding vowel or forms a diphthong with it, see next section.

## 1.3. Diphthongs

Historically all the diphthongs of Common Nordic have been monophthongised in East Nordic, cf. Danish and Swedish *sten*,  $\emptyset$  or  $\ddot{o}$  vs. Norwegian *stein*,  $\emptyset$  y 'stone, island'. New diphthongs, phonetically about 40, cf. Grønnum (1998b:251 ff.), occur however as the result of consonant lenition as seen in 1.2.2., so that diphthongs are phonologically vowel + consonant sequences. The diphthongs can be characterised as *i-*, *u-* or *a-*coloured (cf. Thomsen 2001:217) depending upon the underlying consonant: *i-*diphthongs with the glide [j], *u-*diphthongs with the glide [w], and *a-*diphthongs with the reflex of final r, [ $^{r}$ ], which phonetically is the semi-vocalic realisation of [ $\wedge$ ]. As mentioned above in 1.2.2., /r/ is only realised as a uvular or pharyngeal constriction syllable-initially. Syllable-final /r/ fuses more or less with a preceding vowel into an *a-*coloured diphthong, which in general is simply noted [V $^{r}$ ] in order not to discuss too many phonetic details and to keep in touch with orthography and the derived forms where consonantal r appears, see above. With the low back vowels the result is a simple maximally low vowel, [ $\alpha$ ] or [ $\alpha$ ]:

```
barn [ba'n] 'child'sort [s\land'd] 'sort'storm [sd\land'm] 'gale'får [f\land'] 'sheep'gård [g\land'] 'farm'nyser [ny's\land] 'sneezes'
```

All vowels occur before [j] and [w] forming the two other kinds of diphthongs:

```
i-diphthongu-diphthongdag [dæ'j] 'day'pædagog [pɛda | go'w] 'pedagogue'sej [saj'] 'tough'liv [liw'] 'life'spejder [ | sbajd\wedge] 'scout'lov [l\wedgew] 'law'sloj [sl\wedge'j] 'feeble'lav [law] 'guild'log [l\wedge'j] 'oinon'sovs [s\wedgew's] 'sauce'hog [hø'j] 'hawk'lov [lø'w] 'foliage'
```

The different realisations of the /a/ phoneme give rise to different semi-vowels in the formation of derived words or compounds, where there occurs an alternation between [j] after

[æ] and [w] after [ $\alpha$ ] in realisations of the same word with  $\alpha$ , cf. 1.1.1. above:

```
      dag [dæ'j] 'day'
      -
      daglig [ˈdαwli] 'daily'

      dagbog [ˈdαwbɔ'w] 'diary'
      -
      faglig [ˈfαwli] 'professional'

      fagforbund [ˈfαwf^'bɔn'] 'union'
      -
      flagstang [ˈflawsdaɪ]'] 'flag pole'

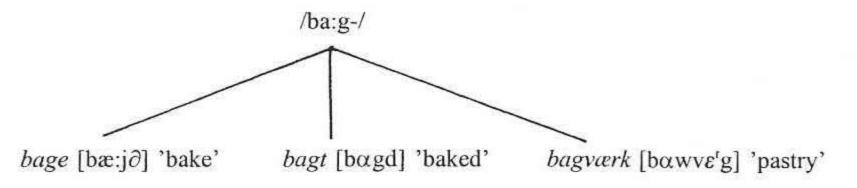
      flagdug [ˈflawdu'] 'bunting'
      -
      flagdug [ˈflawdu'] 'bunting'
```

The underlying consonantal nature of the semi-vowel of the diphthongs is often revealed in inflected or derived word forms where the diphthong is resolved into a vowel + consonant sequence (cf. Grønnum 1998b:281):

a.	[w]:  løbe [lø:b/w∂] 'run'  skrive [sgri:w∂] 'write'  drive [dri:w∂] 'drive'  stiv [sdiw'] 'stiff-COM'  grov [gr∧w'] 'rough-COM'  koge [kå:w∂] 'boil'  bruge [bru:w∂] 'use'	[b, f, g]:  løbsk [løbsg] 'runaway'  skrift [sgrɛfd] 'writing'  drift [drɛfd] 'drove'  stift [sdifd] 'stiff-NEU'  groft [gr∧fd] 'rough-NEU'  kogt [k∧gd] 'boiled'  brugt [br⊃gd] 'used'
b.	<pre>[j]: sige [si:j∂] 'say' søge [sø:j∂] 'seek' spøge [sbø:j∂] 'joke' jage [jæ:j∂] 'hunt (v)' stege [sdaj∂] 'roast'</pre>	[g]: sagt [sagd] 'said' søgt [søgd] 'seeked' spøgt [sbøgd] 'joked' jagt [jagd] 'hunt (n)' stegt [sdægd] 'roasted'
c.	[']:  morder [   mord^] 'murderer'  guitar [   gita'] 'guitar'  motor [   mot^] 'motor'  natur [na   tu'r] 'nature'	[r] morderisk [   mo'd∂risg] 'murderous' guitarist [gitα   risd] 'guitarist' motorisere [motori   se''∂] 'motorise' naturalisme [natura   lism∂] 'naturalism'

The full pattern of possibilities is illustrated by the stem bag- 'bake', which has the following realisations:

Phonology 17



## 1.4. Suprasegmentals

Suprasegmental phenomena are intimately related to syllable and word structure. Two major types of words represent the characteristic build-up of Danish word structure, which exhibits two patterns and the stress contours which articulate them. These patterns are repeated by derived words and compounds: all Danish words have a primary stressed syllable followed either by a secondarily stressed syllable or by a stressless syllable. Further stressless syllables may precede or follow the primary stress:

#### 1.4.1. Word Structure

All Danish words can be divided into two basic types: those ending in a consonant or a full vowel (type A) and those ending in (unstressed) schwa, possibly followed by a consonant (type B)<sup>8</sup>. These two types can be compared to the masculine and feminine - cf. the words mand 'mand', dreng 'boy' vs. kvinde 'woman', pige 'girl' - or the athematic and thematic words of other languages:

Туре	A	Type B
Monosyllabic	Polysyllabic	Polysyllabic
and [an'] 'duck'	ansigt [   ansegd] 'face'	lanse [¹lans∂] 'lance'
næb [nε'b] 'beak'	nabo [   næ:bo] 'neighbour'	made [¹mæ:ð∂] 'feed'
svans [svan's] 'tail'	anse [   anse'] 'consider'	ænse [¹ɛns∂] 'notice'
mand [man'] 'man'	manna [  mana] 'manna'	mande [   man∂] 'man (v)'
		engel [   εη∂l] 'angel'
		finger [   fe1]'^] 'finger'

Native words are canonically either monosyllabic, type A (athematic), or polysyllabic, type

<sup>&</sup>lt;sup>8</sup> This is essentially the analysis proposed by Andersen (1954) into ' $\alpha$  and  $\beta$  words'.

B (thematic):

The polysyllabic words of type A above are in principle derived word forms, compounds or loanwords, and they have accordingly the stress contour typical of such words.

#### 1.4.2. Stress

Because of the essentially monosyllabic nature of word stems, native words are canonically stressed on the initial syllable. Three degrees of stress can be distinguished, i.e. main or primary stress [ | V], secondary stress [ | V], and reduced or removed stress [ | V] (cf. Basbøll 1995):

```
and [an'] 'duck'ansigt [ | an | segd] 'face'lanse [ | lan| segd] 'lance'næb [nɛ'b] 'beak'nabo [ | næ: | bo] 'neighbour'made [ | mæ:| ted'svans [svan's] 'tail'anse [ | an | se'] 'consider'ænse [ | ense [ | ense [ | ense [ | ense [ | man| ted'mand [man'] 'man'manna [ | man| manna'mande [ | man| mande [ | man| ted'
```

As can be seen, the polysyllabic words of type A have a primary - secondary stress contour, just like compounds (in fact, they are compounds, either historically or synchronically), those of type B have the primary stress - stressless contour. See below.

Systematic exceptions to the rule of initial stress are words with light prefixes such as be-, er-, for-, ge-:

```
begynde [be | gø'n\partial] 'begin' beklage [be | klæ'j\partial] 'regret' erstatte [\varepsilon^{r} | sdad\partial] 'replace' forsage [f\wedge^{r} | sæ'j\partial] 'renounce'
```

Foreign words are differently stressed according to their origin (French, Latin, Greek, etc.):

```
frisør [fri | sø' i 'hair dresser' instrument [ensdru | mɛn'd] 'instrument' advokat [aðvo | kæ'd] 'attorney' tragedie [tra | ge'ðjð] 'tragedy'
```

The three degrees of stress are relevant in the distinction between derived words and compounds, and between certain syntactic configurations. The derived-compound distinction is illustrated by the following contrast:

Derived Word	Compound
kvindelig [¹kven∂₀li] 'feminine'	kvindelig [   kven∂   li'] 'female corpse'

Phonology 19

Where the derived word with a light suffix has the [IV - OV] profile, the compound is characterised by the profile [IV - IV], i.e. compounds are prosodically signalled by a primary - secondary stress contour (cf. Rischel 1972). We thus find again the fundamental opposition between type A and type B and their respective stress contours. With more details, the general picture is the following:

Type A Stress: |V - |V

Simple word: | an-|sigt 'face'

Full Prefix + Stem: | ud-1grave 'excavate9

| bi-|drag 'contribution' |for-|klæde 'apron'

over-flade 'surface'

Stem + Full Suffix: | heden-|skab 'paganism'

ejen-|dom 'property'

Compound: | vin-|glas 'wine glass'

barne-|vogn 'pram'

Type B Stress: V = V

Simple Word: | sko<sub>0</sub>le 'school'
Stem + Light Suffix: | skriv<sub>0</sub>-e 'write'

barno-lig 'childish'

Since compounds are composed of autonomous words, they can, within their overall type A pattern ( | V - | V), contain as well Type A as Type B contours:

Type A + A: | ansigts-|træk 'facial features'

Type A + B: | jern-|bane 'railway'

Type B + A: | barne-|vogn 'pram'

Type B + B: | barne-|pige 'nanny'

Syntactically, stress distinctions also play a major part, for instance in the distinction between the ordinary transitive construction Verb + Object as opposed to the incorporation construction Verb + Modifier (a transitive verb followed by a bare noun), or a complex predicate consisting of a verb and a postverbal particle, see 3.1.4. below:

<sup>&</sup>lt;sup>9</sup> In the Danish grammatical tradition preverbs such as ud 'out', which also occur as free forms, are not counted as prefixes. A word like udgrave 'excavate' is therefore seen as a compound - which is also corroborated by prosody. Examples like this demonstrate the delicate boundary between closely related phenomena such as compounding and derivation.

Han <sub>o</sub>læser a vis.

'He is reading the newspaper'

'He reads newspaper' (He is a newspaper reader)

Han | løber | ude.

Han <sub>o</sub>løber | ud.

'He runs outdoors' 'He runs out'

Where the ordinary construction stresses both the verb and the object noun (phrase), or the verb and an adverb, the incorporation and the verb - particle constructions have only one stress, the verb being destressed. They thus signal the creation of a unit, a complex predicate, whence also the traditional label 'unit stress' (cf. Rischel 1980, 1983, Scheuer 1995). This pattern reproduces the stress contour found with light prefixes + stem:

Unit Stress: <sub>0</sub>V - |V

olæse a vis 'read newspaper'

oløbe | ud 'run out'

for- tælle 'tell'

obe- vise 'prove'

#### 1.4.3. The Two Accents

Danish is like the other Scandinavian languages Norwegian and Swedish a two accent language, cf. Gårding (1977). That is, a distinction is made between an Accent 1, which is realised as primary or secondary stress accompanied by a glottal catch ("stød"), signalled by a ['] following the relevant segment<sup>10</sup>, and an Accent 2 without this concomitant feature:

## Accent 1 Accent 2

gul [ | gu'l] 'yellow' guld [ | gul] 'gold' hund [ | hun'] 'dog' hun [ | hun] 'she, female'

mord [ mo' murder' mor [ mo'] 'mother'

vend [|ven'] 'turn-IMP'

ven [ | vεn] 'friend'

But contrary to the Scandinavian tonal accents, which are inherent properties of words, the presence or absence of the stød is partly dependent upon the phonological and morphological environment and may change under inflection and derivation, so that e.g. the same morpheme which carries stød when realised as a simplex word, may lose it when realised as the stem of a derived or inflected word form, cf. the following examples:

## Accent 1 Accent 2

mord [ | mo''] 'murder'
 barn [ | bα'n] 'child'
 morder [ | mo' d∧] 'murderer'
 barnlig [ | bα:nli] 'childish'

Phonology

21

skriv [ | sgri'w] 'write-IMP' - skrive [ | sgri:w∂] 'write-INF'

#### 1.4.3.1. Stød assignment

Type B words ending in schwa have in principle always Accent 2. Only words of type A and type B words ending in a consonant are thus liable of carrying the stød, which is further only realised on long syllables, i.e. syllables containing two morae, a long vowel or a short vowel followed by a sonorant, cf. Basbøll (1998:37 ff.). This is commonly known as "stød-basis", but the moraic interpretation makes this *ad hoc* concept superfluous:

Accent 1		Accent 2
V:	VCsonorant	VC <sub>unvoiced</sub>
se [ se'] 'see'	selv [ˈsɛl'] 'self'	sæt [ sæd] 'put'
dag [ˈdæ'j] 'day'	dan [   dan'] 'form-IMP'	das [   das] 'loo'
hval [   væ'l] 'whale'	hal [   hal'] 'hall'	hat [   had] 'hat'
$p\alpha n [ p\epsilon' n] 'pretty'$	pen [ pεn'] 'pen'	let [ led] 'easy'

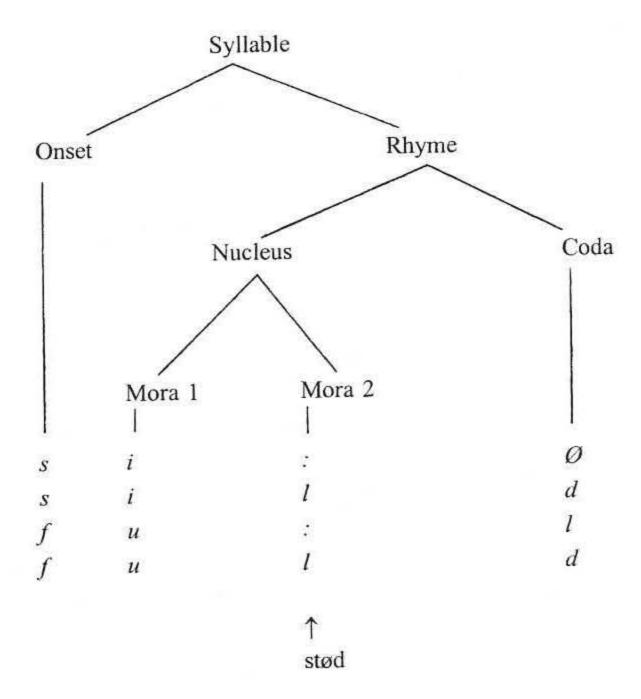
As will become clear presently, a heavy, bimoric syllable constitutes a necessary but not a sufficient condition for the occurrence of Accent 1.

The stød is realised as a brief constriction of the vocal chords followed by a creaky voice phase (cf. Fischer-Jørgensen 1987). Since the stød is a constriction of the vibrating vocal chords, a laryngealisation, and since it has a certain duration, it follows that it can only be realised during the articulation of a long, voiced sound, i.e. a long vowel or a vowel followed by a voiced consonant, i.e. a sonorant (cf. Grønnum 1998b:180). The stød is therefore located on the second mora of a long syllable, i.e. on the final part of a long vowel,  $i: \rightarrow i'$ , or the final part of an underlying long sonorant following a short vowel,  $l: \rightarrow l'$ . The underlying long sonorant is graphically noted by a final 'd', i.e. 'rd', 'nd', 'ld', cf. 1.2.2.:

Orthography	si	sild	fugl	fuld
Morphophonemics	/si:/	/sild/	/fu:l/	/fuld/
Stress Assignment	[   si:]	[   sil:]	[   fu:l]	[   ful:]
Stød Assignment	[   si']	[   sil']	[   fu'l]	[   ful']
	'strainer'	'herring'	'bird'	'full'

In both cases the stød can be interpreted as a compensatory device for length, and in all cases the presence of the stød signals a long - heavy or bimoric - syllable, cf. Basbøll (1998:41 f.). The moric interpretation can be depicted as follows:

The word stød meaning 'thrust, push' was introduced by Høysgaard in 1747 in his Accentuered og raisonnered Grammatica ('Accentuated and reasoned grammar'). It is, somewhat paradoxically, pronounced without a stød: [sdøð].



The assumption of a long sonorant as the reflex of an underlying cluster makes is understandable that the voiced sonorant is in these cases part of the rhyme, not the coda, which hosts other syllable-final consonants: it is so to speak "pushed back" into the rhyme part by the consonant in the coda, but "expelled" from the rhyme into the coda by vocalic length.

That the long vowel may be auditively shortened by the stød (intermediary between plain long and short vowels, cf. Fischer-Jørgensen 1987, Brink et al. 1991:88, Grønnum 1998b:186, 224) appears from alternations between a stød vowel in type A word forms and a long, "stød-less" vowel in type B word forms of the same lexeme:

[V']	[V:]
flag [   flæ'j] 'flag (n)'	flage [   flæ:j∂] 'flag (v)'
bag [ bæ'j] 'bake-IMP'	bage [¹bæ:j∂] 'bake-INF'
skur [   sgu'r] 'scrub-IMP'	skure [   sgu: de de l' scrub-INF'

Words with a long vowel in an open final syllable have in principle Accent 1, i.e. they carry stød. Words with a short vowel followed by a voiced consonant (a sonorant) either have stød or are stødless:

Phonology 23

```
      skal [ | sgal ] 'shell'
      skal [ | sgal ] 'shall'

      mand [ | man' ] 'man'
      man [ | man ] 'one (indef)'

      vend [ | vɛn' ] 'turn-IMP'
      ven [ | vɛn ] 'friend'
```

The words with a short vowel and Accent 1 (stød) are here analysed as having underlyingly a final long consonant, morphophonemically a sonorant +d cluster, the d appearing in derivations whereby the stød disappears, cf. 1.2.2. above. The stød can then be interpreted as a compensatory device for the deleted consonant:

When no independent justification, such as derivational forms, can be adduced as an argument in favour of assuming an underlying long consonant, one can point to the cognate forms of Norwegian and Swedish, which have such long final consonants, cf. Swe. and Norw. *hall* [hal:] 'hall'. And most significantly, stød-carrying consonants tend to be longer than plain consonants, cf. Fischer-Jørgensen (1987), Brink et al. (1991:88) and Grønnum (1998b:186)<sup>11</sup>.

There is however some variation in the realisations of the stød, for instance the phenomenon known as stylistic abbreviation: in fast colloquial speech long vowels may be abbreviated and the stød accordingly relocated onto a following voiced sonorant. Thus *skriv* [|sgri'w] 'write-IMP' becomes [|sgriw'], *død* [|dø'ð] 'dead' becomes [|døð'].

#### 1.4.3.2. Morphology and the two accents

Since the stød signals a heavy (bimoric) syllable, one can assume with Basbøll (1998) that words containing such syllables inherently have Accent 1. It is therefore necessary to explain those cases when they don't by factors which prevent the stød from being realised although the conditioning factors are present. Since the shape of words changes under inflection and derivation, these processes are central for an understanding of the working of the stød.

In most cases the two kinds of words, type A and type B, retain their accentual identity with no change. No intervening rules change the inherent stød on heavy syllables:

Type A - Accent 1		Type B - Accent 2	
ro [   ro']	ro-en [¹ro'∂n]	roe [¹ro:∂]	roe-n [¹ro:∂n]
'calm'	'calm-DEF'	'turnip'	'turnip-DEF'
tank [   tanj'g]	tank-en [   ta₁j 'g∂n]	tanke [¹tarjg∂]	tanke-n [¹taŋg∂n]
'tank'	'tank-DEF'	'thought'	'thought-DEF'

<sup>11</sup> Recent measurements seem however to modify this conclusion, Nina Grønnum p.c.

There are two cases of exceptions to be considered. The first case is the absence of stød, i.e. a change from Accent 1 to Accent 2. The most common cause for this is the addition of a final schwa, whereby the stem loses its stød and the plain long vowel reappears: type B words have, as seen, inherently Accent 2. This is notably the case in the inflection of verbs, but also in the plural of nouns and adjectives:

Accent 1	Accent 2
læser [¹lɛ's∧] 'read-PRES'	læse [¹lɛ:s∂] 'read-INF'
finder [   fen'∧] 'find-PRES'	finde [   fen∂] 'find-INF'
finger [   fer]' \( \) 'finger'	fingre [   ferjr∂] 'finger-PL'
spand [   sban'] 'pail'	spande [   sban∂] 'pail-PL'
hus [   hu's] 'house'	huse [   hu:s∂] 'hus-PL'
stor [   sdo'r] 'big'	store [   sdo:r∂] 'big-PL'

Another cause for the change of accentual profile is the loss of the conditioning factors for the appearance of the stød, i.e. a bimoric syllable. This is the case in the neuter of adjectives in [-ð] whose vowel is shortened by the addition of the ending -t, the ensuing cluster being realised as (unvoiced) [d], cf. 1.2.2. above. So no possibility remains for the stød to be realised in such forms:

Orthography	våd	vådt	sød	sødt
Morphophonemics	v∋:d	v∋:d-t	sø:d	sø:d-t
Devoicing	-	v∋:t-t	-	sø:t-t
Lenition	v⊃:ð	v>:dd	sø:ð	sø:dd
Vowel shortening	220	v∧dd	-	sødd
C-Simplification	5 <del>77</del> ,5	v∧d	=	sød
Stød Assignment	v∋'ð	v∧d	sø'ð	sød

A third case of stød loss is before a light suffix (-ig, -lig, -isk), which counts as a schwa ending, i.e. also in this case the word is turned into type B. When an underlying /d/, whose disappearance conditions the stød on the stem, cf. above, is realised before a suffix, the stød disappears of course for both reasons:

```
søvn [ | sœw'n] 'sleep'-søvnig [ | sœwni] 'sleepy'mod [ | mo'ð] 'courage'-modig [ | mo:ði] 'brave'barn [ | bα'n] 'child'-barnlig [ | bα:nli] 'childish'mand [ | man'] 'man'-mandig [ | mandi] 'manly'
```

Phonology 25

```
skyld [ | sgyl'] 'guilt' - skyldig [ | sgyldi] 'guilty'

jord [ | jo''] 'earth' - jordisk [ | jo'disg] 'earthly'

skænd [ | sgɛn'] 'scold-IMP' - skændig [ | sgɛndi] 'shameful'
```

In prefixed versions of some of these words such as the following:

```
uskyldig [u | sgyl'di] 'innocent' underjordisk [ | >n \ | jo 'disg] 'subterranean'
```

the consonant appears together with a stød, contrary to expectations. This might indicate that the rule which introduces a stød in prefixed forms, see below, overrules the stød removing rule.

The heavy suffixes -dom, -hed, -skab '-dom, -hood, -ship, -ness' have their own stød and remove, although secondarily stressed, a stød from the stem. Such derivations have consequently the stress contour of compounds (with Accent 1 on their final component):

```
mand - | man | dom 'manhood'

sand - | sand | hed 'truth'

gal - | gal | skab 'madness'
```

A derivational suffix can thus remove a stød from the stem, but never induce one.

The second case to be considered is the presence of a stød where there should be none: Accent  $2 \to \text{Accent 1}$ . This happens in some stødless monosyllables and type A polysyllables (cf. 1.4.2.) when the voiced consonant of the definite ending,  $-en [-\partial n]$ , or  $-et [-\partial \delta]$ , is added. All stød inducing inflectional endings in fact consist of a schwa and a sonorant, cf. Basbøll (1998:49). The schwa assimilation, see 1.1.2., then creates the moric possibility of an Accent 1, i.e. the syllabic sonorant "pushes" the preceding sonorant back into the rhyme of the preceding syllable:

In cases such as the last one under a., the simplest analysis seems to be to assume an underlying Accent 1 which in the schwa-final form is replaced by Accent 2, which is of course the normal case. Most words have not, however, this alternation, i.e. they retain the Accent 2 of the vocalic form, cf. above:

```
finne [ | fen\partial] 'fin' finnen [ | fen\partialn] 'fin-DEF'
```

```
kvinde [ | kven\partial] 'woman'kvinden [ | kven\partialn] 'woman-DEF'hinde [ | hen\partial] 'membrane'hinden [ | hen\partialn] 'membrane-DEF'
```

When the conditions, i.e. V: or  $VC_{son}$ :, are satisfied, verbs often have an alternation between Accent 1 in the present tense and Accent 2 in the infinitive because of the ending -e, cf. above. But the few monosyllabic infinitives not ending in unstressed -e, but in a long vowel, have Accent 1. This, however, is the only way to realise a long vowel word-finally:

```
gå [ˈgå'] 'walk' se [ˈse'] 'see'

få [ˈfå'] 'get' du [ˈdu'] 'function, be useful'
```

A major exception to the rule that vocalic words of type B (-e) always have Accent 2, are prefixed verbs, whose infinitive in spite of its final schwa has Accent 1. There are two classes of prefixes to be considered. On the one hand the light stressless prefixes be-, er- and for-, see 1.4.2. above. Their relation to the simple stem is rarely productive, i.e. the meaning of the derived word is seldom predictable from the simplex verb<sup>12</sup>:

tale [¹tæ:l∂] 'speak'	betale [be 1 tæ'l∂] 'pay'
holde [ h∧l∂] 'hold'	beholde [be   h∧l'∂] 'keep'
plante [   pland∂] 'plant'	beplante [be   plan'd∂] 'plant'
$n \alpha r e [ n \epsilon : \partial] $ 'feed'	ernære $[\varepsilon^{r} \mid n\varepsilon^{r}\partial]$ 'feed'
tælle [¹tɛl∂] 'count'	fortælle [f∧r   tɛl'∂] 'tell'

The second class consists of stressed prefixes (preverbs proper), prepositions or adverbs, which under certain conditions are realised as postverbal particles (see 3.1.4.):

```
bryde [|bry:\delta\partial] 'break' afbryde [|\alpha w_1bry'\delta\partial] 'interrupt' tale [|t\alpha:l\partial] 'speak' aftale [|\alpha w_1t\(\alpha'\) l\(\alpha'\) agree' veje [|v\alpha_1\partial] 'weigh' overveje [|\alpha w_1t\(\alpha'\)] 'deliberate' stille [|sdel\partial] 'put' opstille [|\alpha w_1t\(\alpha'\)] 'erect, nominate' grave [|g\alpha:w\partial] 'dig' udgrave [|u\delta_1gr\(\alpha'\)w\(\alpha'\)] 'excavate'
```

Some such prefixed verbs are thus distinct from otherwise homophonous nouns:

Verb - Accent 1	Noun - Accent 2
aftale [   aw   tæ'l∂] 'agree'	aftale [   αw   tæ:l∂] 'agreement'
omtale [   ∧m   tæ'l∂] 'mention'	omtale [   ∧m   tæ:l∂] 'mention'

Phonology 27

## 1.4.3.3. Interpretation of the stød

Historically, Accent 1 is the accent of monosyllables<sup>13</sup>. When it occurs on polysyllables, as it frequently does in Modern Danish, it can in general be taken as a signal not only of the presence of a bimoric syllable, but also that a composite word is to be understood as an accentual "monosyllable", iconically reflecting e.g. a complex predicate as in the case of prefixed verbs. But in view of the nature and occurrence of the stød - replacing length on a long segment - one can perhaps dig somewhat deeper and advance the following generalisation: The stød is a compensatory phenomenon which appears whenever the delicate balance between word structure, length and stress has been disturbed. This has been implicit in the description which precedes.

The only way to realise a truly long plain vowel in Danish is the structure:

In all other cases length - be it vocalic or consonantal - is replaced phonetically by the stød:

$$V: \rightarrow V'$$
  $C: \rightarrow C'$   $se 'see': /se:/ \rightarrow [ | se']$   $fuld 'full': /fuld/ \rightarrow /ful:/ \rightarrow [ | ful']$ 

Accent 1 on monosyllables is thus a compensation for the loss of "weight", i.e. vowel or consonant length.

In polysyllables, there are two cases to be considered. First, there is the alternation between the infinitive and the present tense of (some) verbs. This alternation can be understood in terms of a redistribution of the weight (" $W \rightarrow W W$ ") which, in the infinitive is concentrated on the long vowel, onto the two syllables of the present tense form:

The final schwa "protects", so to speak, the length of the vowel whereas the addition of a final consonant moves some weight away from the primary stress syllable. The stød is then a compensatory device which signals this shift. This view is corroborated by the behaviour of some West Danish dialects where final schwa is apocopated, cf. 1.1.2. above. In some of these dialects, the apocope of schwa is compensated by a stød on the remaining vowel:

<sup>12</sup> With the notable exception of the applicative uses of be-, see 3.1.4.

<sup>&</sup>lt;sup>13</sup> Historically the Pan-Scandinavian Accent 1 is the accent of monosyllables, Accent 2 that of polysyllables (Gårding 1977:7, 17 ff.). This is quite understandable in view of the fact that Accent 1 is a rising tone, whereas Accent 2 is falling-rising, i.e. it presupposes at least two syllables to be realised.

$$skole [sgo:l\partial] \rightarrow skol' [sgo'l] 'school'$$

The second case is that of the prefixed verb forms<sup>14</sup>, where the inherent weight of the verb stem has to be shared with a sometimes primary stressed prefix (the preverb):

But morphology may also overrule the phonological weight principle and determine the accent of the word. The present tense ending -er and the homonymous agentive ending -er induce different accentual contours to verb stems. Historically, however, they are quite different endings: the present tense ending -er is historically non-syllabic, i.e. -r, whereas the agentive suffix comes from Latin -arius and is thus syllabic. One understands then why the present tense ending induces the monosyllabic stress (Accent 1), but the agentive suffix Accent 2:

Infinitive  skriv-e [¹sgri:w∂]  'write'	Present Tense  skriv-er [¹sgri'w∧]  'writes'	Agentive Noun  skriv-er [   sgri:w∧]  'writer'
løb-e [ˈlø:b∂] 'run'	<i>løb-er</i> [   lø'b∧] 'runs'	løb-er [   lø:b∧] 'runner, bishop (chess)'
læs-e [¹lε:s∂] 'read'	læs-er [ lε's∧] 'reads'	læs-er [¹lε:s∧] 'reader'

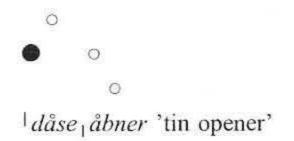
The alternation within verb forms is thus identical to the alternation found in nouns such as finger 'finger', whose singular form (Accent 1) is also historically monosyllabic (fingr), but whose plural is bisyllabic, fingre, and consequently has Accent 2:

#### 1.4.4. Intonation

Intonation is the variation in pitch observed in connected speech, i.e. longer stretches of speech than isolated words and phrases. The basic unit of Danish intonation seems to be the stress group (cf. Grønnum 1992). Such stress groups, or feet, consist of a primary stressed syllable

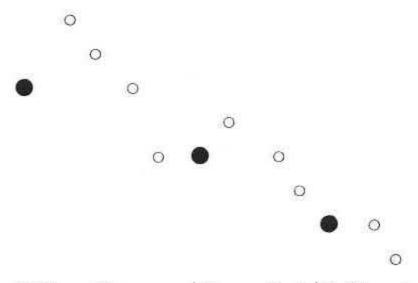
Phonology 29

followed by a number of unstressed syllables regardless of morphological or syntactic boundaries. The pitch contour of the stress group is the following (stressed syllable followed by three stressless syllables):



The contour of the stress group is thus a stressed nucleus followed by a rise and a falling tail of unstressed syllables.

These stress groups - the local rising-falling curves - combine together within an overall falling pitch contour - the global falling curve - so that the distance in pitch between the stressed nucleus and the following unstressed rise decreases within the overall falling curve of the neutral declarative utterance:



Dåse | åbneren | ligger jo i | køkkenet. 'The can opener is in the kitchen, now'

Under neutral intonation - the default intonation of Grønnum (1998b:295) - all the (primary) stressed syllables typically have the same degree of stress, i.e. there is no so-called sentence accent in Danish as e.g. in English, where the last stressed syllable typically is more prominent than the others. But individual stressed syllables can of course be emphasised for semantic or pragmatic reasons. This is achieved by an increase in the rise following the stressed nucleus, or more often by decreasing the surrounding intervals, which has exactly the same effect (cf. Grønnum 1998b:302).

Apart from the local rising contours in stress groups a really rising contour does not exist under neutral intonation. But the general overall falling curve falls more or less steeply depending on the length and the function of the utterance. The neutral declarative contour is slightly falling - it spans about half an octave - without any sudden or abrupt falls. There is for instance no final dramatic fall. And the more stressed syllables and consequently the longer the utterance, the less steep is the curve. But with fewer stressed syllables and unstressed

<sup>&</sup>lt;sup>14</sup> This is also the case in other instances of prefixed word forms, cf. uskyldig 'innocent' and underjordisk 'subterranean' discussed in 1.4.3.2. above.

syllables interspersed between these peaks, the steeper is the curve:

Peter skal orejse til Jylland i laften med ltoget klokken latten ltredive.

'Peter is leaving for Jutland tonight by the six-thirty train'

Peter skal rejse.

'Peter is leaving'

The same falling contour is actually found with questions too. And the more the question value is morphologically and syntactically signalled, the more the overall curve is similar to that of statements. Echo questions and questions phrased as statements have a very even, level intonation (typically, however, with a slight final rise):

(Det er en Simca). Det er en Simca? '(It is a Simca.) It is a Simca?'

Yes-no questions signalled by subject inversion have a slightly falling contour:

Er det en Simca? 'Is it a Simca?'

and hv-questions (wh-questions) have an even more falling contour approaching that of statements:

Hvorfor skulle det være en Simca? 'Why should it be a Simca?'

#### 2. MORPHOLOGY

#### Morphemes, morphs and paradigms

Historically, Danish morphology is of the inflecting type, i.e. there is a high degree of fusion between roots and inflectional endings, and internal flexion, i.e. Umlaut and Ablaut, is widespread. Typologically, however, Danish has moved increasingly away from the old Indo-European inflectional type towards a more and more agglutinating type of morphology (cf. Heltoft 2001a, Hansen and Heltoft Forthc.: Ch. 8). For instance this is clearly visible in the regular inflection of nouns, viz. *hestenes* 'the horses', where a number of individually separable morphs follow the root *hest*-:

In this example, every separable morph can be assigned a content of its own and no morph represents more than one content, i.e. every morph corresponds to a monosemic morpheme, just as in a classical agglutinating language like for instance Turkish<sup>15</sup>. The same point can be demonstrated for the regular verbal flexion, viz. *spilledes* 'was (being) played':

But since segmentation does not amount to analysis, the basic question is then in both cases which morph represents which content (morpheme), i.e. what categories are assigned to the different separable segments. We return to this question in the following sections on the morphology of the different parts of speech.

As stated above, also internal flexion types occur in the core vocabulary such as Umlaut:

The internal flexion sometimes combines with external endings so that one has to reckon with discontinuous morphs also:

Another feature reminiscent of the Germanic origins of the language is the Ablaut patterns in

<sup>15</sup> The last morph, -s, is however rather a clitic than an inflectional ending, see 2.1.1.4. below.

the strong verbal paradigm, such as the following irregular verbs with a two-vowel alternation:

Infinitive	Preterite	<b>Participle</b>	
tage	tog	taget	'take'
drage	drog	draget	'draw'
gå	gik	gået	'walk'
lyve	løj	løjet	'lie'
bide	bed	bidt	'bite'

or the three-vowel Ablaut pattern (i/y - a - u) of the following verbs:

Infinitive	Preterite	<b>Participle</b>	
i/y	a	и	
springe	sprang	sprunget	'jump'
drikke	drak	drukket	'drink'
binde	bandt	bundet	'bind'
finde	fandt	fundet	'find'
tvinge	tvang	tvunget	'coerce'
synge	sang	sunget	'sing'

Whereas Umlaut and Ablaut are historical vestiges, they are widespread and systematic in the core vocabulary. Nevertheless the strong (Ablaut) verbs have increasingly been joining the weak (regular) agglutinating inflectional type, which is the only productive morphological pattern. So in the contemporary language the normal preterite of e.g. *jage* 'hunt' seems to be the weak formation *jagede* replacing the strong form *jog*, still active with many speakers, however.

Whether agglutinating or fusional, the inflectional morphology is organised in paradigms of simple binary oppositions. Whenever more than two members seem to constitute such a paradigm, there are good reasons to break it down into different dimensions, cf. Heltoft (1996b), Hansen and Heltoft (Forthc.: Ch. 8). Offhand it seems probable that the case paradigm of the personal pronoun has three members, nominative, accusative and genitive (han 'he'):

Nominative	han
Accusative	han
Genitive	han

But in view of the fact that the genitive can hardly count as a proper case form - for instance it is never governed by a verb or a preposition - it seems well motivated to resolve the paradigm and assume not a three-way unidimensional opposition, but two binary dimensions:

Morphology

33

	Nominative	Accusative
- Genitive	han	ham
+ Genitive	hans	

The same kind of reasoning can be applied to the active verbal paradigm whose three finite forms, imperative, present and preterite do not form a three-way paradigm (købe 'buy'):

ImperativekøbPresentkøberPreteritekøbte

but two paradigms, a modal opposition between imperative and indicative, and a temporal opposition within the indicative between a present and a preterite:

	Present	Preterite
Indicative	køber	købte
<b>Imperative</b>	køb	

And in the same vein it is practical to keep the number and the definiteness inflection of the noun as independent dimensions, as it is also traditionally done, cf. the paradigm of *hest* 'horse':

	Indefinite	Definite
Singular	(en) hest	hesten
Plural	heste	hestene

#### Word structure, inflection, derivation and compounding

A Danish word consists of a stem and a possible number of affixes. The simplest stem is a root alone, or a root enlarged by a thematic vowel, cf. the two word types, A and B of 1.4.1.:

Гуре А	Type B
vind 'wind'	kvind-e 'woman'
ånd 'spirit'	ånd-e 'breath' 16

kvind-e 'woman' jød-e 'Jew' nåd-e 'grace' ynd-e 'grace' kvind-agtig 'effeminate' jød-isk 'Jewish' nåd-ig 'gracious' ynd-ig 'lovely'

<sup>16</sup> The reason for assuming a thematic vowel in words of type B, i.e. a stem forming enlargement of the root, and not just an accidental vocalic ending of the root, is the fact that this vowel may drop before a vocalic ending, i.e. the thematic vowel signals the attachment position of derivational endings:

Such stems can be further enlarged by both pre- and suffixes:

u-mand-ig 'unmanly' u-kvind-e-lig 'unwomanly'

All inflectional endings are suffixes and follow all derivational suffixes:

*u-mand-ig-hed* 'unmanliness' *u-mand-ig-hed-e-n-s* 'the unmanliness's'

One of the most characteristic features of Danish morphology, however, is the widespread use of compounding, i.e. the combination of independent stems into one word<sup>17</sup>. Such compounds are also always binary. So even when apparently consisting of more than two components, they can always be broken down into a binary structure (cf. Rischel 1972, Bauer 1978):

- a. vin-glas 'wine glass' hals-kæde 'necklace'
- b. [[rød-vin]-s-glas] 'red wine glass'[perle-[hals-kæde]] 'pearl necklace'

The segment -s- in the first example under b. is a ligament often inserted into a compound, e.g. always when the first component is itself composite.

#### 2.1. Nominal Morphology

The morphological categories of the noun are gender, number and definiteness. Gender is an inherent, lexically determined feature of the root. Case is only relevant in personal pronouns. The genitive ending -s is not a proper case ending, but a clitic element attached to the last constituent of the noun phrase, see 2.1.1.4. below.

#### 2.1.1. The Noun

The morphological build-up of the noun can be illustrated by the following agglutinative representation:

hest 
$$-e$$
  $-e$   $-n$   $-e$   $\rightarrow$  hestene 'the horses' Root Number Def Gender Number

Gender is not a separable morph of the noun, but a lexical property of the root triggering agreement morphemes in endings or other words of the same phrase. The gender of a

Morphology 35

particular word is thus revealed by agreement with other, variable words, such as determiners, adjectives and anaphoric pronouns, but first and foremost by the choice of flexional ending in the definite inflection, -n for the Common gender, -t for the Neuter.

#### 2.1.1.1. Number

Nouns distinguish a singular from a plural 18. There are six different plural patterns:

1 A. The ending -(e)r added to the singular. This is, together with type 3 A. below, the most productive way of forming the plural:

bil	bil-er	'car - cars'
SØ	sø-er	'lake - lakes'

and it is the only plural of nouns of type B, cf. 1.4.1., i.e. thematic nouns in -e:

kvind-e	kvind-e-r	'woman - women'
tank-e	tank-e-r	'thought - thoughts

1 B. The ending -(e)r accompanied by Umlaut of the root:

tand	tænd-er	'tooth - teeth'
ko	kø-er	'cow - cows'

2 A. The ending -e:

hus	hus-e	'house - houses'
stol	stol-e	'chair - chairs'

2 B. The ending -e accompanied by Umlaut of the root:

far, fader fædr-e 'father - fathers'
mor, moder mødr-e 'mother - mothers'

3 A. A zero ending:

<sup>18</sup> In some cases a third number, a collective, can be identified:

Singular	Collective	Plural
høne 'hen'	hons 'poultry'	høner 'hens'
øje 'eye'	øjne '(pair of) eyes'	øjer 'eyelets, loops'
okse 'ox'	øksne '(pair of) oxen'	okser 'oxen'
mand 'man'	mand '(group of) men'	mænd 'men'

The system represents only sporadic historical collective formations and has never been a truly productive system.

<sup>&</sup>lt;sup>17</sup> Orthography actually acknowledges this one-word status by writing compunds as one word. The hyphens of the following examples are only there for illustrative purposes.

mus	mus	'mouse - mice'
ting	ting	'thing - things'

#### 3 B. The zero ending accompanied by Umlaut of the root:

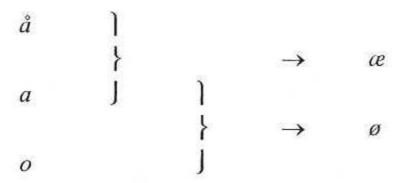
mand	mænd	'man - men'
barn	børn	'child - children'

The six different plural patterns<sup>19</sup> can thus be reduced to three types, which all occur in two shapes, with or without Umlaut of the root:

	-er	-e	Ø
- Umlaut	gud - gud-er	stud - stud-e	skud - skud
	'god - gods'	'ox - oxen'	'shot - shots'
+ Umlaut	and - ænd-er	fader - fædr-e	mand - mænd
	'duck - ducks'	'father - fathers'	'man - men'

#### Umlaut

Many words of the basic vocabulary belong to one of the Umlaut types. Historically the most widespread traces are the *i*-Umlaut (i.e. a,  $\mathring{a} \to \mathscr{C}$ ,  $o \to \emptyset$ )<sup>20</sup>, with isolated cases of *u*-Umlaut (i.e. a,  $\mathring{a} \to \emptyset$ ). The patterns are as follows:



Examples of the different types:

å	$\rightarrow$	æ	
hånd		hænder	'hand - hands'
tå		tæer	'toe - toes'
rå		ræer	'yard - yards (mar.)'
gås		gæs	'goose - geese'

Morphology 37

a	->	æ	
tang		tænger	'tongs'
tand		tænder	'tooth - teeth'
stad		stæder	'city - cities'
and		ænder	'duck - ducks'
kraft		kræfter	'power - powers'
fader		fædre	'father - fathers'
mand		mænd	'man - men'
а	$\rightarrow$	Ø	
datter		døtre	'daughter - daughters'
barn		børn	'child - children'
o	$\rightarrow$	Ø	
fod		fødder	'foot - feet'
rod		rødder	'root - roots'
ko		køer	'cow - cows'
so		søer	'sow - sows'
bog		bøger	'book - books'
moder		mødre	'mother - mothers'

## Syncope

Noun roots ending in -Cl, -Cn or -Cr have an epenthetic  $e[\partial]$  in the singular which is dropped in the plural, cf. 1.1.2. on schwa assimilation. Historically many such words of the basic vocabulary were monosyllabic:

fængsel	fængsler	'prison - prisons'
engel	engle	'angel - angels'
himmel	himle	'sky -skies'
hilsen	hilsner	'greeting - greetings'
finger	fingre	'finger - fingers'
datter	døtre	'daughter - daughter'
moder	mødre	'mother - mothers'

This syncope in the plural is however not always noted in the orthography, cf. bible - bib(e)ler 'bible - bibles', hilsen - hils(e)ner 'greeting - greetings', neger - neg(e)re 'negro - negroes'. The same syncopes characterise the definite forms of such nouns, cf. 2.1.1.3. below.

## 2.1.1.2. Gender and noun classes

Danish nouns are distributed into two gender classes: a Common gender and a Neuter. The gender is a property of the root and is only disclosed by agreement with determiners and adjectives. Determiners are in the Common gender characterised by a final -n, in the Neuter

<sup>&</sup>lt;sup>19</sup> In some loanwords from English the plural ending -s has been preserved: check 'cheque' - checks 'cheques', but the -s plural seems in general incompatible with the structure of Danish, and the ending is accordingly replaced by a native formation, cf. older film - films vs. contemporary film - film, i.e. type 3 A. The current plural of e.g. party is thus partyer, type 1 A, not parties.

<sup>&</sup>lt;sup>26</sup> Recall that å, formerly written aa, represents historically a long a, cf. 1.1. above.

by a final -t. Most adjectives take a -t in the Neuter but are left unchanged in the Common gender:

e <b>n</b> mand	Common	'a man'
et hus	Neuter	'a house'
de <b>n</b> mand	Common	'that man'
det hus	Neuter	'that house'
mi <b>n</b> mand	Common	'my man, husbond'
mit hus	Neuter	'my house'
en stor-Ø mand	Common	'a big man'
et stort hus	Neuter	'a big house'

The opposition between the two genders is neutralised in the plural in favour of a common plural ending -e in determiners and adjectives:

disse mænd	'these men'	
disse huse	'these houses'	
mine mænd	'my men, husbands'	
mine huse	'my houses'	
store mænd	'big men'	
store huse	'big houses'	

The Common-Neuter distinction has no obvious semantic basis: whereas most animates are of the Common gender, such basic and usual words as *menneske* 'man, human being', *barn* 'child' and *dyr* 'animal' are Neuter.

#### Countable and uncountable: individuation

There is however a significant correlation between the genders and the countable - uncountable distinction: Common gender favours a countable reading, Neuter gender an uncountable reading of nouns. This distinction is however subsumed by a more general distinction between individuated vs. non-individuated. The latter category covers not only what is traditionally labeled 'uncountable', but also second and third order entities, i.e. verbal nouns and all sorts of propositional content. Uncountable nouns, regardless of lexical gender, which normally do not take the indefinite article, cf. 2.1.1.3., are thus individuated, and thereby made 'countable', by being used with the indefinite article in the Common gender:

Morphology 39

```
øl (Neu) 'beer'

kaffe (Com) 'coffee'

lort (Neu) 'shit'

en øl 'a (bottle or brand of) beer'

en kaffe 'a (cup or brand of) coffee'

en lort 'a turd'
```

Conversely, Common countable nouns can be used with the indefinite Neuter quantifiers *noget* 'some/any' or *meget* 'much' in order to denote an indefinite quantity:

```
en suppe 'a soup' noget suppe 'some soup' en torsk 'a cod' noget torsk 'some cod'
```

Nouns used in this way as uncountables trigger Neuter agreement in a predicative adjective regardless of their lexical gender:

```
Noget suppe var dejligt. 'Some (Neu) soup (Com) would be nice (Neu)'

And er godt. 'Duck (Com) is good (Neu)'

Vin er dyrt. 'Wine (Com) is expensive (Neu)'
```

These constructions should also be seen in relation with co-subject constructions with *med* 'with', cf. 3.1.5.:

```
Det er godt med and. 'It is good (with/to eat) duck'

Det er dyrt med vin. 'It is expensive (with/to drink) wine'
```

But an attributive adjective normally agrees with the lexical gender of the noun:

```
En hvid (Com) vin ville være dejligt (Neu) til fisken.
'A white wine would be delicious with the fish'
```

```
Du skal vel have noget (Neu) fedtfattig (Com) pølse (Com).<sup>21</sup> 'You would like, I assume, some low-fat sausage'
```

The correlation between unindividuated denotation and the Neuter is increasingly exploited in the anaphoric pronouns, and exhibits a semantic rather than strictly grammatical agreement between antecedent and anaphor. The tendency in contemporary Danish is thus to use the anaphoric personal Neuter pronoun *det* 'it' only about unindividuated or abstract entities such as entire sentences, whereas the Common *den* 'it' will refer to an individuated entity:

<sup>&</sup>lt;sup>21</sup> After the Neuter quantifier noget 'some', the adjective can however also assume the Neuter form: noget fedtfattigt pølse 'some low-fat sausage'.

```
Kampen (Com) var lang og hård. Det (Neu) var et mareridt. 'The fight was long and hard. It was a nightmare'
```

Kampen (Com) var lang og hård. Den (Com) var heldigvis næsten forbi. 'The fight was long and hard. Fortunately it was almost over'

One even hears utterances as the following:

```
Der er tre problemer (Neu). Den første er ...
'There are three problems. The first is ...'
```

where the Neuter word *problem*, when resolved into countable individual entities, is resumed by the Common pronoun *den*.

#### Personal gender

Besides the lexical gender there is a system of natural gender in anaphoric pronouns which, within human entities, distinguishes a masculine from a feminine (with the usual exceptions for entities treated as humans: pets, personified animals and entities such as ships):

+ Human		- Human		
Masculine	Feminine	Common	Neuter	
han	hun	den	det	

The multiple possibilities for anaphoric reference thus offered give rise to different combinations:

```
kvinden (Com) 'the woman'
                                  ... hun (Fem) ...
manden (Com) 'the man'
                                  ... han (Masc) ...
lægen (Com) 'the doctor'
                                  ... han/hun (Masc/Fem) ...
barnet (Neu) 'the child'
                                  ... det (Neu)/han/hun (Masc/Fem) ...
gidslet (Neu) 'the hostage'
                                 ... det (Neu)/han/hun (Masc/Fem) ...
hunden (Com) 'the dog'
                                  ... den (Com)/han/hun (Masc/Fem) ...
koen (Com) 'the cow'
                                 ... den (Com)/hun (Fem) ...
skibet (Neu) 'the ship'
                                 ... det (Neu)/hun (Fem) ...
```

With Neuter menneske 'man, human' in the generic sense of the entire human race, the only possibility seems to be the Neuter pronoun det, unless one switches to the generic plural, de.

#### 2.1.1.3. Definiteness

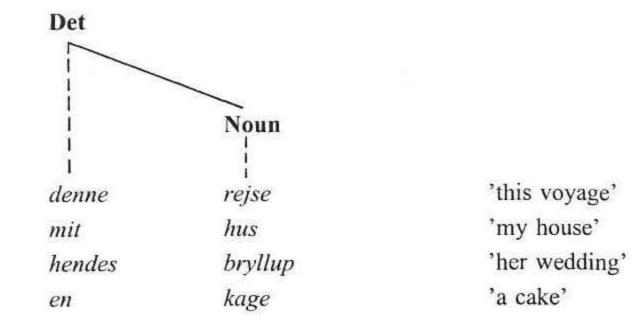
The basic structure of the noun phrase is the combination of a determiner and a noun, where

Morphology 41

the lexical content of the noun denotes a class or a category, and where the determiner specifies different values of this class or category such as identifiability, quantity, deictic status, etc. The determiner is either a proclitically used pronoun, quantifier or numeral, or a genitive phrase (see 2.1.1.4.), or in the case of the simple definite article an inflection on the noun:

	Det	N	
Demonstrative	dette	hus	'this house'
Possessive	mit	hus	'my house'
Quantifier	mange	huse	'many houses'
Indefinite	et	hus	'a house'
Genitive	bondens	hus	'the farmer's house'
Definite	•)	hus-et	'the house'

The basic structure of the noun phrase is thus assumed to be the combination of a pronominal element and a lexical noun, with the pronoun as the head, cf. Heltoft (1996a). The only pronouns which never occur as determiners are the personal pronouns. Their determiner function, however, is handled by their genitive form or by the possessive pronouns:



Determiners thus do not define a word class, they are a special proclitic use of a certain limited set of pronouns and other material. The definite article appears, as seen, as an inflection on the noun<sup>22</sup>.

However, one must be careful to distinguish between the use of pronouns as sole heads of noun phrases and as determiners, whether followed by a lexical noun or not. In the first case the personal pronoun keeps its case inflection, viz. de - dem 'they -them':

<sup>&</sup>lt;sup>22</sup> Historically the postposed article is an enclitic demonstrative which followed case and number endings on the noun, cf. Old Icelandic *hest-s-in-s* 'the horse's', where both the noun and the article are inflected in the genitive. This is no more the case in Modern Danish, where the article has become morphologically fully integrated in the flexional system, viz. *hest-en-s* 'the horse's'. See 2.1.1.4.

Vi så dem. 'We saw them'

In the second case, as a determiner, there is no case inflection of the otherwise homonymous demonstrative pronoun de 'those':

Vi så de bedste spillere. 'We saw the best players' Vi så de bedste Ø. 'We saw the best'

#### Indefinite

Danish distinguishes an indefinite from a definite article. The indefinite article is the unstressed (proclitic) version of the numeral *en* 'one'. Its proclitic status is revealed by the accentuation, unit stress, cf. 1.4.2., as opposed to the double stress in the numeral use of the same word:

Indefinite Article	Numeral '1'	
et hus 'a house'	et hus 'one house'	

The indefinite article occurs only with countable nouns in the singular and has no plural form:

en kvinde - kvinder	et hus - huse	smør
'a woman - women'	'a house - houses'	'butter'
en cykel - cykler	et bord - borde	kul
'a bicycle - bicycles'	'a table - tables'	'coal'

The absence of the indefinite article and a plural form with uncountable nouns (cf. 2.1.1.2. above) are obviously related: the indefinite article is historically the numeral '1', and uncountable, unindividuated "stuff" is neither compatible with such a counting word, nor with the kind of counting presupposed by the plural.

#### Definite

Definiteness, on the other hand, is expressed both in the singular and the plural, and that by a morphological inflection, whenever this is possible. The forms of the definite inflectional article are the following:

	Common	Neuter
Singular	-e-n	-e-t
Plural	-e-n-	e

It consists of a definiteness morpheme, -e, an agreement morpheme, -n or -t for Common and Neuter respectively, the gender opposition being neutralised in the plural form -n, and a

Morphology 43

number morpheme, zero in the singular, -e, in the plural:

N	Number	Definite	Gender	Num	ber
hest	0	-е	-n	Ø	'the horse'
hus	Ø	-e	-1	Ø	'the house'
hest	-e	-e	-n	-e	'the horses'
hus	-е	-е	-n	-е	'the houses'
mand	Ø	-е	-n	Ø	'the man'
bil	Ø	-e	-n	Ø	'the car'
mænd	Ø	-e	-n	-е	'the men'
bil	-er	-e	-n	-e	'the cars'

This agglutinative representation, cf. Heltoft (2001a), Hansen and Heltoft (Forthc.: Ch. 8), demands some phonetic adjustment in order to produce the actually occurring definite forms:

hesten	-	hestene
huset	=	husene
manden	æ	mænden
bilen	(2)	bilerne

Both adjustments, however, are phonetically quite natural. The first is the coalescence of two consecutive e's (schwas), -e-e, into a single -e: hest-e-e-n-e 'the horses', cf. that the definite article is apparently -n or -t after nouns of type B: kvinde - kvinde-n 'the woman', billede - billede-t 'the picture', etc. The second is the syncope of -e after the ending -er: bil-er-e-n-e 'the cars'. But this syncope occurs also in forms ending in -er for other reasons, cf. the definite plural of spiller - spillere 'player(s)', spillerne from a representation such as: spiller-e-n-e. The obvious advantage of the analysis is that it assumes the same definiteness marker in articles, nouns and adjectives, namely -e. It also explains why an -e suddenly appears in plurals of type 3 (zero ending): mænd-e-n-e 'the men', ting-e-n-e 'the things', where there should be no plural ending: it is simply the definiteness marker.

The definiteness feature will always seek to be expressed inflectionally. And this is indeed the case in a simple noun phrase with no preposed attributive:

**Def** + hus 
$$\rightarrow$$
 hus-et 'house-DEF'

But when there is an intervening attributive, the definite article is so to speak unable to pass on its features to the noun and remains consequently as a preposed determiner as in most contemporary Indo-European languages:

The forms of the preposed definite article are the following:

	Common	Neuter
Singular	den	det
Plural	de	

As seen above, the preposed definite article being unable to attach to the noun as an inflectional ending, it "copies" its feature of "definiteness", -e, onto the next constituent, i.e. an adjective, which occurs then in the definite form (see 2.1.4.1. below), while the noun remains uninflected:

Def Art	Adj	N	
den	stor-e	hest	'the big horse'
det	rød-e	hus	'the red house'
de	smukk-e	øer	'the pretty islands'

With demonstrative and possessive determiners the definiteness feature is also copied onto a preposed adjective, but the noun is still left untouched. Contrary to Norwegian and Swedish, Danish has no "double definiteness":

Dem	Adj	N	
dette	121	hus	
dette	rød-e	hus	'this (red) house'
Poss	Adj	N	
mit	9 <del>.77</del> 4	hus	
mit	rød-e	hus	'my (red) house'

The same occurs with a preposed genitive phrase in the determiner position, see next section:

Genitive	Adj	N	
bageren-s	-	hus	
bageren-s	rød-e	hus	'the baker's (red) house'

#### 2.1.1.4. Case: the genitive

Danish nouns are not inflected for case. The ending -s found with nouns is a genitive morpheme, but it is not an inflectional ending on the noun. As has been repeatedly pointed out from Jespersen (1894:317 f.) to Norde (1997) and Herslund (2001), the genitive -s of the modern Germanic languages, English and the Scandinavian languages, does not behave as a "normal" case ending. Whereas there seems to be no doubt that etymologically it represents

Morphology 45

one - and the most frequent - of the genitive case endings of Common Nordic and Old Danish (cf. Heltoft 2001a), it lacks two of the defining features of case forms: it is never governed by a verb or a preposition<sup>23</sup>, and it never determines any kind of agreement. In "normal" case languages all the constituents of a noun phrase, i.e. the determiner and attributive adjectives, have the same case form as the head, as for instance in Latin *domus huius boni regis* 'house this-GEN good-GEN king-GEN'. But in Danish only one constituent hosts the genitive:

denne gode konges hus 'this good king's house'

What is remarkable of this situation can only be properly appreciated when the genitive is considered in function, i.e. as preposed in a noun phrase. As can be seen from the following examples, only the last constituent of the genitive phrase carries the ending -s:

[kongens] hus 'the king's house'
[kongen af Danmarks] hus 'the king of Denmark's house'
[kongen af halvdelen af Danmarks] hus 'the house of the king of half of Denmark'
[kongen der har erobret halvdelen af Danmarks] hus 'the house of the king who has conquered half of Denmark'

If the -s was an inflectional ending, one would at least expect it not to be attached to the last constituent of the phrase, but to its lexical head. This is however impossible:

\*kongens af Danmark hus king-DEF-GEN of Denmark house 'the house of the king of Denmark'

Such structures are found in Swedish, where they are however often qualified as archaic or artificial, cf. Norde (1997:81 ss.), Herslund (2001:10), but they are impossible in Danish. So the morpheme -s behaves as a phrasal affix rather than as an ordinary case inflection. It attaches in fact invariably to the last constituent of a genitive phrase, regardless of the lexicosyntactic class of this constituent<sup>24</sup>. For instance it can be an adverb:

parret nedenunder-s kat
couple-DEF downstairs-GEN cat
'the cat of the couple downstairs'

Vestiges of the use of the genitive after the preposition til 'to' are widespread: til søs 'to sea', til bords 'to table', etc., but do not constitute a productive pattern. No preposition governs the genitive form today.

For examples of such "group genitives", as Jespersen calls them, in English, Swedish and Norwegian, see Plank (1989:27 f.) and Norde (1997:64, 81 ff.).

When a relative clause is the final constituent of a noun phrase, the genitive ending is attached to its final constituent whether this is a stranded preposition or even a finite verb, at least in the colloquial language:

Ham du havde fortalt det til-s cykel ...
him you had told it to-GEN bicycle
'the bicycle of the one you had told it'

Den har jeg fået af en vi kender-s onkel.

that have I got from one we know-PRES-GEN uncle
'I have got it from the uncle of someone we know'

As for the syntax of the genitive phrase, i.e. the constituent delimited by a final -s, one needs to consider in detail the structure of the Danish noun phrase. As above, we assume that the syntactic head of a Danish noun phrase is the determiner, cf. Heltoft (1996a). A noun phrase with a preposed genitive is necessarily definite, cf. Norde (1997:73), even though the noun is in the indefinite form, as it is also the case when the determiner is a demonstrative or a possessive, or even if the genitive phrase itself is indefinite. This is conclusively shown by the definite form of an attributive adjective:

kongens smukke hus 'the king's beautiful house' en konges dyre hus 'a king's expensive house'

What makes the phrase definite is the genitive phrase as such, which must consequently be the determiner, and what creates a genitive phrase and makes it possible for it to occupy the determiner function is precisely the -s, cf. Jensen (1994). Syntactically the phrasal affix -s then turns a noun phrase into a determiner. And the use of the genitive has historically been gradually confined to the function as a preposed determiner, which is its only function in Modern Danish, alongside its use as a predicative phrase, which it shares with other determiner material. The use of the genitive or the possessive pronoun is also the only possibility for a personal pronoun to act as a determiner, cf. above, so the parallel is perfect:

kongens hus 'the king's house'

Huset er kongens. 'The house is the king's'

mit/hans hus 'my/his house'

Huset er mit/hans. 'The house is mine/his'

Having lost all other uses than as a determiner, which as seen implies its use as a predicative complement, the genitive has acquired the status of a phrasal affix, i.e. as a clitic which is always attached to the last constituent of a preposed determiner phrase thus marking the rightmost limit of the determiner. The Danish genitive marker -s is a clitic whose position is determined at phrase level, the level intermediate between word and clause level.

Morphology 47

Although etymologically it is a direct continuation of the inflectional ending -s of Old Danish, which ultimately goes back to Indo-European, it acquires a new status as a consequence of important changes in Danish morphology and syntax: morphologically Danish changes into a more agglutinating type, cf. Heltoft (1996b, 2001a), Hansen and Heltoft (Forthc.: Ch. 8), and the preceding sections; syntactically the language creates a very rigid phrase structure with the determiner as its syntactic head.

#### 2.1.1.5. Possession

As seen in the preceding section, possessive relations are expressed by a genitive phrase in determiner position. All varieties of attributive possession (see e.g. Baron et al. 2001), however, can also be expressed in alternative ways, i.e. by prepositional phrases following the noun. Such attributive prepositional phrases have no grammaticalised choice of preposition, such as e.g. English of or German von. In fact all kinds of prepositions occur in such constructions, the choice being dependent on the selectional restrictions of the head noun:

hovedet på hesten 'the head on the horse'
moderen til Sofie 'the mother to Sofie'
datteren af grevinden 'the daughter of the countess'
begyndelsen til enden 'the beginning to the end'
frisparket fra Laudrup 'the free-kick from Laudrup'
ilden fra batteriet 'the firing from the battery'
angrebet på/mod Bagdad 'the attack on/against Bagdad'
stormen på Bastillen 'the assault on the Bastille'

One thus has the choice between two syntactic constructions, the genitival and the prepositional. This alternation:

hestens hoved 'the horse's head' - hovedet på hesten 'the head of the horse'

is governed by information structure. The different sequences of possessor and possessum permit an exploitation of the alternation so that the choice is governed by the topicality of the two constituents: the more topical tends to come first, and the syntactic construction is chosen accordingly, cf. Baron (1996).

#### 2.1.2. Pronouns

Pronouns are the only words inflected for case, and among them only the personal pronouns have a full inflection in three cases, nominative, accusative, genitive. In the personal pronouns

the -s is thus a proper case ending, not a clitic<sup>25</sup>. Because of its particular syntactic status the genitive constitutes, however, a different dimension from the nominative-accusative opposition, as explicated in 2. above.

#### 2.1.2.1. Personal pronouns

The personal pronouns distinguish three persons and two numbers. In the third person singular there is a four-way gender distinction insofar as the lexical genders of nouns, common and neuter, are duplicated by the personal gender forms *han*, masculine, and *hun*, feminine, see 2.1.1.2. The flexion of the personal pronouns, including the 3. person reflexive, is the following:

Sing.	Nom	Acc	Gen
1.	jeg	mig	<u> 198</u> 0'
2.	du	dig	
3. Masc.	han	ham	hans
3. Fem.	hun	hende	hendes
3. Com.	den	den	dens
3. Neut.	det	det	dets
3. Refl.	-	sig	12
Plur.			
1.	vi	os	vores
2.	I	jer	jeres
3.	de	dem	deres
3. Refl.		sig	deres

The lacking genitive forms of 1. and 2. Sg., and 3. Refl. Sg. are substituted by the possessive pronouns *min* 'my', *din* 'your', and *sin* 'his/hers-REFL', see 2.1.2.2. below. As the formal pronoun of address the 3. Pl. is used, spelled with a capital initial, as in German: *De, Dem, Deres*.

Since verbs are not inflected for person (cf. 2.2.1.1.), the nominative pronouns obligatorily accompany a finite verb as subject if no nominal or (other) pronominal subject is present. The tendency of the modern language is however to treat the nominative-accusative distinction not as a case distinction determined by syntactic function, but rather as a distinction

Morphology 49

between an immediately preverbal form (the "former" nominative) as an anaphoric subject vs. a form used in all other contexts, cf. contrasts like the following:

Vi kommer nu. 'We are coming now'

Han rejser i morgen. 'He is leaving tomorrow'

Du skal skrive teksten. 'You shall write the text'

De har ingen stole. 'They have no chairs'

VS.

Os der har gjort hele arbejdet, (vi) vil også have nogle fordele.

'Us who have done the whole job, (we) will have some advantages too'

Ham der har redigeret dette, må være idiot.

'Him who has edited this must be an idiot'

Dig og Andreas skal skrive teksten. 'You and Andreas shall write the text'

Dem uden stole må stå op. 'Those without chairs must stand up'

The nominative-accusative opposition is thus rather an opposition between an anaphoric subject form, the nominative, and a default form, the accusative. Case thus seems in Modern Danish to be confined to anaphoric expressions.

### 2.1.2.2. Possessive pronouns

Alongside the personal pronouns and interacting with their genitive forms, there is a set of possessive pronouns which, like the demonstratives (see 2.1.2.3.), also act as determiners. They are inflected for gender and number agreeing, not with the possessor, but with the possessum, i.e. the head noun in determinative function:

	Com.	Neut.	Plur.
1. Sg.	mi-n	mi-t	mi-n-e
2. Sg.	di-n	di-t	di-n-e
3. Refl.	si-n	si-t	si-n-e
1. Pl.	vor	vor-t	vor-e
2. Pl.	jer	jer-t	jer-e <sup>26</sup>

The 1. and 2. person singular *min*, *din* supply for the missing genitive of the personal pronoun. The 1. and especially the 2. person plural are practically obsolete, although still found in solemn registers. Instead, as in the 3. person plural, it is the genitive of the personal pronoun

<sup>&</sup>lt;sup>25</sup> In fact pronouns are "full" noun phrases, and they thus satisfy the conditions for the placement of -s, i.e. it is attached to the last constituent of a noun phrase. When personal pronouns are expanded, it is therefore the clitic variant of -s which reappears, cf.:

<sup>\*</sup>hans derovre cykel 'his over there bicycle' ham derovre-s cykel 'him over there's bicycle'

<sup>&</sup>lt;sup>26</sup> One could possibly go a step further and isolate the initial consonant: *m-i-n*, *d-i-n*, etc. as a morpheme of personal number. This would leave a morpheme *-i-*, which can be interpreted as 'person', cf. the analogically leveled person paradigm in the plural of the personal pronoun: *vi*, *I*, *de* [di] 'we, you, they', which all contain the vowel [i], Lars Heltoft p.c.

which is used:

```
vort nye hus 'our new house' \rightarrow vores nye hus 'our new house'
```

In the 3. person singular there is only the reflexive form *sin* referring to the subject of the same clause. In all other instances it is the genitive of the personal pronoun, viz. *hans, hendes, dens, dets*, which is used. There are thus contrasts like the following between the possessive reflexive determiner which agrees in gender and number with its head noun (the possessum), not with its antecedent, and the genitive of the personal pronoun, which agrees with its antecedent (the possessor), and not with its head noun:

```
... Peter ... He took his-REFL-COM-SG new car ...'

... Karen ... Hun tog sit nye tøj (Neu).

'... Karen ... She took her-REFL-NEU-SG new clothes ...'

... Karen ... Hun viste os sine smykker (Pl).

'... Karen ... She showed us her-REFL-PL jewelry'

... Peter ... Vi fandt hans gemmested (Neu).

'... Peter ... We found his-MASC-SG hiding place'

... Peter ... Vi så hans nye bil (Com).

'... Peter ... We saw HIS-MASC-SG new car'

... Karen ... Vi købte hendes smykker (Pl).

'... Karen ... Vi købte hendes smykker (Pl).

'... Karen ... Vi købte hendes smykker (Pl).

'... Karen ... Vi købte hendes smykker (Pl).
```

In the 3. person plural the genitive of the personal pronoun, *deres*, is used both reflexively and non-reflexively. In certain advanced or regional varieties of Danish, the reflexive determiner is being used also in the plural, like in Swedish and Norwegian, in reflexive cases:

```
... dem ... De tog deres nye bil.

'... them ... They took their new car'

... dem ... Vi så deres nye bil.

'... them ... We saw their new car'

... dem ... De havde sat sine tydelige spor.

'... them ... They had left their clear traces'
```

Used as a determiner the possessive pronoun is proclitic and the whole phrase has consequently unit stress, unless emphatic stress is added:

Morphology

51

Her er omin stol. 'Here is my chair'

Her er min stol. 'Here is my chair'

Used as a predicative complement, like other genitive expressions, the pronoun has no stress reduction:

Stolen er | min. 'The chair is mine'

#### 2.1.2.3. Demonstrative pronouns

Demonstrative pronouns traditionally distinguish three degrees of deictic distance corresponding to the three persons of the personal pronoun, three locative adverbs, and the ensuing distinctions of proximate and distal uses:

	1. Person	2. Person	3. Person
Common	denne	den	hin
Neuter	dette	det	hint
Plural	disse	de	hine
Adverb	her	der	hist

This system is however almost obsolete and has been replaced by a system distinguishing only two degrees:

	Proximate	Distal
Common	denne	den
Neuter	dette	det
Plural	disse	de
Adverb	her	der

But this system too is rapidly losing ground in the spoken language where the proximate-distal distinction is being taken over by the deictic adverbs *her* 'here' and *der* 'there' in combination with the distal, which is homonymous with the 3. person personal pronoun *den*, *det*, *de*:

	Proximate	Distal
Common	den her	den der
Neuter	det her	det der
Plural	de her	de der

Demonstratives are used both as pronouns and determiners. In fact, the forms *den*, *det*, *de* are identical both to anteposed forms of the definite article, cf. 2.1.1.3., and to the 3. person personal pronouns (common, neuter and plural). It differs however from the personal pronoun

by its lack of case inflection (i.e. the accusative form dem, 3. person plural). In fact determiners are never inflected for case: As stated above (2.1.2.1.), case inflection seems in Modern Danish to presuppose anaphoricity, and determiners are never anaphoric by themselves.

As a determiner, the demonstrative pronoun occupies the determiner slot of the noun phrase, while the deictic adverbs follow the head noun:

denne bil 'this car'

den bil her 'this car here'

disse huse 'these houses'

de huse der 'those houses there'

But the tendency of the spoken language is to keep the two components together thereby creating new synthetic forms, as it were, like den-her 'this' vs. den-der 'that':

den her bil 'this (here) car' de der kasser 'those (there) boxes'

which may eventually lead to a repetition of the adverb after the noun. In such cases the first adverb can express either local or communicative deixis, i.e. the boxes we are currently talking about, whereas the second adverb only expresses local deixis, i.e. the spatial position of the boxes (Lars Heltoft p.c.):

de her kasser her/der 'these boxes here/there' de der kasser der/her 'those boxes there/here'

As autonomous pronouns the two components, pronoun and adverb, are inseparable:

Kom og flyt den her ned! 'Come and move this one (here) down!'

The possibility of case inflection in the plural shows that it is in fact the personal pronoun which in combination with the deictic adverbs has taken over the pronominal demonstrative function:

Tag dem der med! 'Bring those (there) along!'

whereas the lack of case inflection in determiner function points to the demonstrative (distal) pronoun:

Tag de (\*dem) der kasser med! 'Bring those boxes along!'

## 2.1.2.4. Interrogative pronouns

The interrogative pronouns repeat, as in many languages, the personal pronouns' distinction

Morphology 53

between human and non-human. They also have a special form for the genitive:

	+ Human	-Human	
- Genitive	hvem	hvad	'who - what'
+ Genitive	hvis		'whose'

Specialised, and sometimes composite, pronouns are e.g. hvor 'where', hvorhen 'where to', hvorhenne 'where' (see 2.1.4.4.), hvordan 'how', hvorfor 'why', hvor mange 'how many'.

The interrogative pronoun also has an adjectival series, inflected like other adjectives, see 2.1.4. below:

	Common	Neuter	
Singular	hvilken	hvilket	'which'
Plural	hvilk	e	

In the colloquial language, however, these forms are often substituted by periphrastic formations with the pronoun *hvad* 'what' and the preposition *for* 'for' followed by an indefinite noun phrase:

Hvilken hånd vil du have? 'Which hand do you choose?'

Hvad for en hånd vil du have? 'What (for a) hand do you choose?'

## 2.1.2.5. Indefinite pronouns

Indefinite pronouns constitute a rather heterogeneous class of pronominal forms. There is first the personal substitute man 'one' (which corresponds fairly closely to French  $on^{27}$ ). The form can only be used as a subject. In all other functions the numeral en 'one' is used:

Man føler sig ikke velkommen her.

De behandler en som skidt her.

They treat you like dirt here'

They appreciate one's work here'

Whereas man is really a personal pronoun, a neutralisation of all verbal persons, the indefinite nogen 'some, any' is a specifically indefinite pronoun of the third person denoting an unidentified or unidentifiable, specific or non-specific person or entity:

Nogen har prøvet at bryde døren op. 'Someone has tried to break in the door'
Hvis nogen prøver at bryde døren op ... 'If some/anyone tries to break in the door ...'

<sup>&</sup>lt;sup>27</sup> Also the etymological resemblance is close: as French on is historically an unstressed nominative version of the noun homme 'man', so is Danish man a grammaticalised unstressed version of mand 'man'.

Noget er gået galt. 'Something has gone wrong'
Hvis noget går galt ... 'If some/anything goes wrong ...'

The flexion of this pronoun is as follows:

	Common	Neuter	
Singular	nog-e-n	nog-e-t	'some - any'
Plural	nogl	-е	

As other third person pronouns, except the personal pronoun, the indefinite *nogen* can function as a determiner. Especially the plural *nogle* may be used as a kind of suppletive indefinite article in the plural:

```
nogle huse '(some) houses' nogle tændstikker '(some) matches'
```

Its status as an article is however somewhat dubious since nogen/noget also occurs in the singular instead of the indefinite article and thus contrasting with it: en ost 'a cheese' vs. noget ost 'some cheese'.

The distinction between a specific ('some') and a non-specific reading ('any') can, in the written language, be rendered as a contrast between the regular plural *nogle* (specific) and the (formally) singular Common form *nogen* (non-specific). The colloquial language uses  $nogen^{28}$  in both cases:

Jeg leder efter nogle tændstikker. 'I am looking for some matches'
Har du nogen tændstikker? 'Have you got any matches?'
Lad mig få ild hvis du har nogen tændstikker tilbage. 'Give me a light if you have any matches left'

The indefinite nogen enters into a suppletion relation with the negative pronoun, Common ingen 'nobody, no', Neuter intet or ingenting 'nothing', Plural ingen 'no':

Han har ingen/ikke nogen penge. 'He has no money'
Vi har intet/ingenting/ikke noget at miste. 'We have nothing to lose'

## 2.1.2.6. Quantitative pronouns

Quantitative pronouns and quantifying expressions also constitute a rather heterogeneous set of forms and expressions. The simple quantifying form *megen* 'much' is inflected as an adjective with a suppletive plural meaning 'many':

Morphology 55

	Common	on Neuter	
Singular	megen	meget	'much'
Plural	mang	ge	'many'

The tendency of the contemporary language is, as stated (cf. 2.1.1.2.), to use the Neuter in unindividuated expressions so that the regular agreement pattern in the singular is being abandoned:

```
megen tid → meget tid 'much time' megen vind → meget vind 'much wind' mange mennesker 'many people' mange penge 'much money'
```

The pronouns corresponding to 'all', al, and 'each, every', hver, are also inflected like adjectives. The quantifier al also has a suppletive dual, begge 'both':

	Common		Neuter
Singular	al		al-t
	hver		hver-t
Dual		begge	
Plural		all-e	

The distributive pronoun hver only occurs in the singular:

hver time 'every hour' hvert kvarter 'every quarter (of an hour)'

and can be used either as a determiner, as in the preceding examples, or as a pronoun:

Hver røver fik sin del. 'Every robber got his share'
Hver af røverne fik sin del. 'Each of the robbers got his share'

As a pronoun it also occurs as a free predicative:

Røverne fik en del hver. 'The robbers got a share each'

The totally quantifying al 'all', and its dual and plural, begge, alle, belong to the set of predeterminers which precede the determiner in the noun phrase:

alle hans søskende 'all his siblings' begge disse biler 'both (of) these cars'

Other quantifiers such as indefinite *noget* 'some', *lidt* 'a little' or constructions with measure nouns as determiners undergo, as other determiners except the demonstratives, the rule of unit

<sup>&</sup>lt;sup>28</sup> Pronounced  $[n \supset \partial n]$  or  $[n \supset n\partial]$  as a regularly recreated plural.

```
56
```

stress, cf. 1.4.2.:

```
onoget smør 'some butter'
of pen flaske vin 'a bottle (of) wine'
of kartofler 'a kilo (of) potatoes'
of med flaske kartofler 'a kilo (of) potatoes'
of med flaske kartofler 'a kilo (of) potatoes'
of med flaske kartofler 'a kilo (of) sugar'
```

Expressions with meget, mange, flere 'several' or numerals do not occur with the reduced stress characteristic of unit stress, which seems to indicate that their status is much like that of the demonstratives.

#### 2.1.3. Numerals

The Danish numerals are the well known Indo-European ones, with one exception however. The cardinal numbers 1-20 are the following:

```
en to tre fire fem seks syv otte ni ti
elleve tolv tretten fjorten femten seksten sytten atten nitten tyve
```

From 20 to 100 the system is a mixture of a decimal and a vigesimal system:

tyve	'20'
tredive	'30'
fyrre(tyve)	'40'
halvtreds(indstyve)	'50'
tres(indstyve)	'60'
halvfjerds(indstyve)	'70'
firs(indstyve)	'80'
halvfems(indstyve)	'90'
hundrede	'100'
tohundrede	'200'
sekshundrede	'600'
tusind	'1000'
titusind	'10,000'
en million	'1,000,000'

The long forms from 40 to 90 are, apart form some fixed expressions, only used for the formation of ordinal numbers (e.g. halvtredsindstyvende '50th'), but they disclose the system: halvtredsindstyve properly means '2½ times 20', halvfjerdsindstyve '3½ times 20'. These formations are old ways of computing with a word sinde meaning 'time' and combinations of the word halv 'half' and the ordinal numbers, where halv + fjerde 'half + fourth' means '3½'

Morphology 57

(or '1/2 from 4')29.

Ones precede tens and are joined to them by the coordinating conjunction og 'and' in the formation of complex numbers. The og is omitted after vowel final hundrede 'hundred:

enogtyve	'21'
femogtredive	'35'
syvoghalvfjerds	'77'
otteoghalvfems	'98'
hundredeotteogfyrre	'148

The ordinal numbers are from 7 and onwards (with the exception of 11 and 12) formed by the addition of the ending -ende, i.e. syvende, ottende, niende, tiende:

første anden tredie fjerde femte sjette ellevte tolvte '1st-6th, 11th, 12th' tiende sekstende treogtyvende syoghalvfjerdsindstyvende '10th, 16th, 23rd, 77th'

As determiners, numerals are not reduced by unit stress, which seems to indicate a demonstrative value:

```
| en | krone<sup>30</sup> 'one crown' | tretten | øre '13 øre' | fyrre(tyve) | røvere '40 robbers' | hundredesytten | undskyldninger 'umpteen excuses'
```

## 2.1.4. The Adjective

Adjectives have two kinds of inflection: an agreement inflection and an inflection for comparison.

#### 2.1.4.1. Agreement

There are two dimensions to the agreement inflection of adjectives: gender and number agreement, and definiteness agreement. Attributive or predicative adjectives agree with their head noun in gender and number. The endings are the following:

	Common	Neuter
Singular	Ø	-I
Plural	-e	

<sup>&</sup>lt;sup>29</sup> This usage is also found in indications of time where e.g. halv fire 'half four' means 'three thirty'.

Homographic en krone, but with unit stress oen krone, is a phrase with the indefinite article, 'a crown', whereas enkrone with compound stress, en krone, denotes the coin, cf. oen en krone 'a one-crown coin'.

as in the following examples:

```
en stor bygning (Com) 'a big building' et stort hus (Neu) 'a big house' store bygninger (Pl) 'big buildings' store huse (Pl) 'big houses'
```

The definiteness inflection is invariably (both genders and numbers) a final -e, the same as the definiteness element of nouns, copied onto the adjective by a preposed definite determiner (cf. 2.1.1.3.). Opposed to indefinite structures such as:

```
en smuk have 'a beautiful garden' et smukt hus 'a beautiful house' smukke haver 'beautiful gardens' smukke huse 'beautiful houses'
```

there are thus definite structures like:

den smukke have 'the beautiful garden' de smukke haver 'the beautiful gardens' det smukke hus 'the beautiful house' de smukke huse 'the beautiful houses'

Adjectives in -sk may take a -t in the Neuter: et frisk(t) brød 'a fresh loaf', but do not do it systematically. Adjectives in -sk denoting nationality never do: en dansk spiller, et dansk hold 'a Danish player, a Danish team', et svensk forbud 'a Swedish prohibition'. Adjectives ending in the vowels -å, -o, -u, -a, are invariable in number and definiteness: det blå hus 'the blue house', de blå huse 'the blue houses'. Adjectives in -e are further invariable in gender: en lille hytte 'a little cabin', et lille hus 'a little house', det lille hus 'the little house'. This adjective also lacks a plural, where små occurs as a suppletive form: de små huse 'the little houses'. The definite inflection is optional in adjectives in -i, -y: det fri(e) valg 'the free choice', den ny(e) regering 'the new government'. Certain adjectives are always invariable in gender. This is the case of adjectives ending in -t: parat 'ready'. Adjectives in -et, formally past participles, have the plural and the definite forms in -ede:

en spidset blyant 'a sharpened pencil' den spidsede blyant 'the sharpened pencil'

Adjectives and participles in -Ct have -Cte in the plural and the definite:

```
en nybagt kage 'a newly baked cake' den nybagte kage 'the newly baked cake'
```

As the preposed attributive adjective agrees with its head noun, the predicative adjective agrees in general in gender and number with its subject noun:

et stort hus (Neu) 'a big house' nogle store huse (Pl) 'some big houses' Huset er stort. 'The house is big' Husene er store. 'The houses are big'

Morphology 59

But the tendency of the contemporary language is, however, to leave the predicative adjective uninflected for number:

De var parat(e). 'They were ready' Vi er tilfreds(e). 'We are satisfied'

This is especially common when the adjective is expanded by a prepositional complement:

De var meget ked(e) af beslutningen. 'They were very sorry about the decision' Vi er parat(e) til at gennemføre det. 'We are ready to carry it through'

And it seems to be the normal solution with participles in -(e)t:

Nu var blyanterne spidset. 'Now the pencils were sharpened' Nu var alle kagerne bagt. 'Now all the cakes were baked'

## 2.1.4.2. Comparison

Adjectives are inflected for comparison in the well known categories comparative and superlative according to the following pattern:

Positive	e Comparative Superlative		
ny	ny-ere	ny-est	'new'
blank	blank-ere	blank-est	'bright'
sjælden	sjældn-ere	sjældn-est	'rare'

Some adjectives have Umlaut in the comparative and superlative:

ung	yngre	yngst	'young'
stor	større	st <b>ørst</b>	'big'

And some have suppletive stems:

god	bedre	bedst	'good'
gammel	ældre	ældst	'old'
lille	mindre	mindst	'little'

Finally, some adjectives are not inflected, but form the comparative and superlative by the preposed adverbs *mere* 'more' and *mest* 'most':

kompliceret	mere kompliceret	mest kompliceret	'complicated'
fuldkommen	mere fuldkommen	mest fuldkommen	'complete'

On the other hand, quantifiers like få 'few' and mange 'many', have the full series of forms:

få	færre	færresi
mange	flere	flest

The numeral en 'one' has two forms which formally resemble superlatives: eneste 'only (one)', and the ordinal først 'first'. The intensifier selv 'self' also has a superlative, selveste 'the one and only'.

Whereas the comparative is indeclinable, the superlative has the definite inflection when required, cf. 2.1.1.3. and 2.1.4.1.:

han er yngst 'he is youngest' han er den yngste 'he is the youngest' hendes yngste bror 'her youngest brother'

## 2.1.4.3. Adverbs

The adverbs constitute a rather heterogeneous class of words some of which are born adverbs indicating time or place:

nu 'now'	allerede 'already'	altid 'always'
her 'here'	der 'there'	overalt 'all over'

Others are derived from adjectives. Adverbs derived from variable adjectives normally add a final -t. They are thus identical to the neuter form of the adjective:

god 'good'	godt 'well'
smuk 'beautiful'	smukt 'beautifully'
vigtig 'important'	vigtigt 'importantly'
tidlig 'early'	tidligt 'early'

Many adverbs, however, especially those derived from adjectives in -ig, drop the -t in the modern language:

Han er ikke rigtig klog. 'He is not in his right mind'

Adverbs derived from invariable adjectives have the same form as the adjective:

idiotisk 'idiotic' or 'idiotically'

#### 2.1.4.4. Spatial adverbs

The class of adverbs in Danish is not, as in many languages, coextensive with the bigger class

Morphology 61

of invariable words. A class of spatial expressions distinguish up to three forms, two dynamic and one static form, cf. Hansen (1980) and Hansen and Heltoft (Forthc.: Ch. 1). The uninflected form is dynamic and telic, the other dynamic form derived with -ad is atelic, and the form in -e is static:

Dy	ynamic	Static	
Telic	Atelic		
ind	ind-ad	ind-e	'in'
ud	ud-ad	ud- $e$	'out'
op	op-ad	орр-е	'up'
ned	ned-ad	ned-e	'down'
hen	hen-ad	henn-e	'over'
frem	frem-ad	fremm-e	'forward'
over	-	ovr-e	'yonder'
bort	=	bort-e	'away'
af	-	$af [a\partial]^{31}$	'off'
væk	22	141	'away'

The short form is used with a telic meaning. Verb + adverb have unit stress thereby signalling the creation of a complex predicate, cf. Harder et al. (1996):

```
Han ogik | ud. 'He went out' Han oløb | ind. 'He ran inside'
Hun otog låget | af. 'She took off the lid' Hun okom | ned. 'She came down'
Han oløb | hen til huset. 'He ran over to the house'
```

The form in -ad is dynamic but has no telic meaning of goal. There is again unit stress:

Han ogik | udad. 'He walked (further) out' Hun ogik | nedad. 'She walked downwards'

The form in -e is used when no idea of goal or direction is implied, whether the verb is static or dynamic. A dynamic verb is thus presented as contained within the static frame laid out by the adverb. Only the verb *være* 'be' exhibits unit stress, cf. 3.1.1. below:

Han | sidder | ude. 'He is sitting outside' Låget  $_0$ er | af  $[a\partial]$ . 'The lid is off' Hun | sover | nede. 'She sleeps downstairs' Flaget  $_0$ er | oppe. 'The flag is up' Han | løber | henne ved huset. 'He is running over at the house'

<sup>&</sup>lt;sup>31</sup> This regular form of the directional af 'off' has no special written form. The converse adverb på 'on' has no form in -e, viz. \*[på∂] in the standard language, cf. Pedersen (2001).

#### 2.1.5. The Noun Phrase

As appears from the preceding sections, the Danish noun phrase is organised with a determiner as its syntactic head. The noun itself is unable to constitute a nominal unit, a noun phrase. In fact, the only uses of a bare noun is as a predicative complement or as an incorporated copredicate, see 3.1.4. below, i.e. the bare noun is a predicative form. The only class of words which are able, in and by themselves, to constitute a nominal unit are pronouns (and of course proper names). The view adopted here is therefore that a noun phrase can only be constituted by a pronoun or by some equivalent determiner material such as a genitive or a quantifying phrase, or by turning a noun into something equivalent to a pronoun. And this is exactly the function of the definite inflexion. The minimal noun phrase is thus a pronoun (den 'it') or an articulated noun (bil-en 'car-DEF'), and in fact both kinds of expression have as their main function that of an anaphor.

But the two kinds of expressions also combine in order to create more developed nominal structures. In that case the pronoun occupies the determiner position and becomes cliticised to the lexical noun, when there is one. The noun being a dependent on this determiner constitutes the lexical head of the phrase. The different slots of a fully expanded noun phrase are the following:

	Predeterminer	Determiner	Numeral	Adjective	Noun	Adverbial <sup>32</sup>
1.	alle	mine	syv	søde	kusiner	fra Fyn
2.	begge	deres		rige	onkler	-
3.	15.	dette	12	lille	hus	2
4.		den	ene	røde	lampe	over sengen
5.	10-1	en	35	stor	bamse	~
6.	870	bondens	S <del>3</del>	frodige	marker	-
7.	22	en pose	121	rådne	tomater	2
8.	161	(hus-et)	S <b>+</b> 2	*	hus-et	på bakken
9.	100	(hus-et)	(#)	190	hus-et	-
10.	151	det	9.74	i.e.	150	

<sup>1. &#</sup>x27;all (of) my seven sweet cousins from Funen'. 2. 'both (of) their rich uncles'. 3. 'this little house'.

So one could insert a second adjective position after the noun or, alternatively, let it occupy the adverbial position in this case.

Morphology 63

Two series of remarks are in order at this point. The first one concerns the internal structure of the noun phrase. One could in fact argue that the inflected noun, viz. bil-en 'car-DEF', does not occupy the noun slot but the determiner slot, thereby underscoring even more the resemblance between the articulated noun and the pronoun. Notice in particular that the noun is only inflected when all preceding slots, except the predeterminer, are empty, so nothing prevents in principle this solution. The second series is the observation by Heltoft (1996a) that there is a remarkable resemblance between the topological structure of the noun phrase and that of the clause, see 3.2. below: where the clause begins with a slot whose content can be characterised as the illocutionary frame, the noun phrase's first slot lays out the quantitative frame; the second slot in the clause contains noticeably the finite verb, i.e. the element stating the anchoring of the utterance to reality, and the second slot of the noun phrase, the determiner, is what assures the referential anchoring of the expression; the following slots contain then, both at clause and phrase level, the lexical material, i.e. the notional content thus being anchored within the overall frame laid out by the first constituent. This parallelism is the more convincing as the very tight topological structure of the Danish clause in many respects recalls the tight phrase structure of other languages, cf. Heltoft (1992).

# 2.2. Verbal Morphology

The verbal morphology is like the nominal morphology both fusional and agglutinating. There is accordingly a distinction between a weak (regular, agglutinating) and a strong (irregular, fusional) conjugation. Within the weak as well as the strong conjugation there is a distinction between thematic and athematic forms.

#### 2.2.1. The Verb

The verb distinguishes between finite and non-finite forms. The finite forms exhibit a mood distinction between imperative, a practically obsolete subjunctive and an indicative. The tense dimension distinguishes a past (preterite) from a present, or rather a non-past form, which covers the present as well as the future. The future can also be expressed by combinations of the modal verb *ville* 'will' and the infinitive. Within the non-finite forms there is a distinction between the nominal infinitive and the adjectival participles. The inflectional categories are the following with the forms of the regular verb *lave* 'make, do':

Finite:	Mood					
	Imperative	(Subjunctive)	Indicative			
	lav	(lav-e)	lav-e-r			
	Tense					
	Present	Preterite	(Future)			
	lav-e-r	lav-e-de	vil lave			

<sup>4. &#</sup>x27;one of the red lamps above the bed'. 5. 'a big teddybear'. 6. 'the farmer's fertile field'. 7. 'a bag of rotten tomatoes'. 8. 'the house on the hill'. 9. 'the house'. 10. 'it'.

<sup>32</sup> The attributive adjective normally precedes the noun, but when it has an expansion of its own, it follows:

en rig ø 'a rich island' en ø rig på historie 'an island rich in history'

#### Non-Finite:

Infinitive

lav-e

Present Participle

Past Participle

lav-e-nde

lav-e-t

As suggested in 2. above, however, Danish morphology seems best to be captured by reducing paradigms to binary oppositions on two dimensions. The finite forms can accordingly be represented by the following two-dimensional chart (without the obsolete subjunctive):

	Imperative	Indicative
Present	lav	lav-e-r
Preterite	lav-e-	-de

Only in the present is there a modal opposition between an imperative and an indicative.

Besides these simple forms there are corresponding compound forms with auxiliaries have 'have' or være 'be' + the past participle, which constitute a completely parallel system of perfect forms:

	Simple	Compound (Perfect)
Present	lav-e-r	ha-r lav-e-t
Preterite	lav-e-de	hav-de lav-e-t
Future		
Present	vil lav-e	vil hav-e lav-e-t
Past	vill-e lav-e	vill-e hav-e lav-e-t

A further morphological distinction is between the active and the passive signalled by -s on finite as well as non-finite forms (the passive infinitive). This distinction also has the characteristics of a modal system, see 2.2.2.

#### 2.2.1.1. Personal affixes

The verb has no inflection for person, i.e. there is no subject-verb agreement:

```
1.Sg. jeg
2.Sg. du
3.Sg. han/hun

synger, ved, er

1.Pl. vi
2.Pl. I
3.Pl. de

'sing(s), know(s), (am), are, (is)'
```

Morphology 65

Until around 1900 a distinction between singular and plural could be maintained, at least in the written language:

```
1.Sg. jeg
2.Sg. du
3.Sg. han/hun

synger, ved, er
'sing(s), know(s), (am), are, (is)'

1.Pl. vi
2.Pl. I
3.Pl. de

synge, vide, ere
'sing, know, are'
```

# 2.2.1.2. The TAM-system

As stated in 2.2.1. above, the finite verbal categories comprise mood, tense and the simple-compound (infectum - perfectum) distinction involving the past participle.

#### Mood

The only productive modal opposition is between the imperative and the indicative. The imperative is always identical to the verb root, i.e. it has no ending:

Kom herhen! 'Come here!'

Lav det ordentligt! 'Make it properly!'

Køb det dyreste! 'Buy the most expensive!'

This zero-ending in the imperative produces some curious forms of stems in -Cr, n, l which are mostly avoided in the written language (but which are perfectly pronounceable: klistr! 'glue!', krydr med peber! 'spice with peper!', åbn 'open', angr 'repent')<sup>33</sup>.

The subjunctive only occurs as vestiges in fixed expressions. It is a thematic formation identical to the infinitive:

Kongen længe leve! 'Long live the king!'

Ære være hans minde! 'Let us pay tribute to his memory'

Fandentagemig! 'The devil take me (i.e. Goddamnit)'

Det være så ulogisk det være vil. 'Be it utterly illogical'

The indicative - traditionally called so, but as it appears, not a regular mood form - is the default declarative and interrogative form. In fact, modal oppositions are in Modern Danish rather expressed by the tense forms.

<sup>33</sup> The written form would rather be *klister*, but forms like *krydder* 'spice', *åben* 'open', *handel* 'trade', are for some reason not the codified forms, cf. Hansen (1990).

#### Tense

As seen above, the basic temporal opposition is between a present (or a non-past) and a preterite. This opposition is realised by a weak (regular) or a strong conjugation. Both types can in the present tense have either thematic or athematic forms. In the preterite the strong conjugation has only athematic forms with the characteristic Germanic Ablaut patterns.

The thematic conjugation - the regular and productive pattern - is characterised by a thematic vowel -e [ $\partial$ ] between the stem and the mood-tense endings:

Present	lav-e-r	spill-e-r	klistr-e-r	hent-e-r
	'make'	'play'	'glue'	'fetch'

Only a few verbs have athematic (sometimes abbreviated) present tense forms:

Present	gør-r	hav-r <sup>34</sup>	gå-r	se-r	dø-r	gø-r
	gør	har	går	ser	dør	gør
	'do'	'have'	'walk'	'see'	'die'	'hark'

In the preterite, thematic weak forms retain the -e and add -de:

Preterite	lav-e-de	spill-e-de	klistr-e-de	hent-e-de
	'made'	'played'	'glued'	'fetched'

whereas athematic weak forms add the ending -te or -de directly to their stem:

Present	spis-e-r	læs-e-r	rejs-e-r	smag-e-r	dø-r	ha-r
Preterite	spis-te	læs-te	rejs-te	smag-te	dø-de	hav-de
	'eat'	'read'	'travel'	'taste'	'die'	'have'

Strong verbs, which may be thematic in the present, always have a different stem in the preterite, either with a zero ending or with a short athematic form -t/-de:

Present	find-e-r	· sidd-e	-r spring-e-r	gø-r	gå-r	se-r
Preterite	fand-t	sad	sprang	gjor-de	gik	så
	'find'	'sit'	'jump'	'do'	'walk'	'see

The principal outlines of the verbal flexional morphology are thus the following. In the weak conjugation the same root is inflected either thematically (most verbs), the stem being the root

Morphology

67

enlarged by thematic -e, or athematically with the stem = the root, or both, i.e. thematic forms in the present, athematic forms in the preterite:

	Thematic	Athematic
Root	hent-'fetch'	dø- 'die'
Stem	hent-e	dø-
Infinitive	hent-e	dø
Present	hent-e-r	$d \emptyset$ - $r$
Preterite	hent-e-de	dø-de
Past Part.	hent-e-t	$d\phi$ - $d$
Root	smag- 'taste'	
Stem	smag-e	smag-
Infinitive	smag-e	
Present	smag-e-r	
Preterite		smag-te
Past particip	le	smag-t

The strong conjugation is characterised by its special form in the preterite which is always athematic and most often changes the root vowel (historically by Ablaut or breaking). There are four patterns of which three have vowel change. They can be grouped into two major types: type 1. where the present tense stem vowel is identical to the vowel of the past participle, and type 2. where they are different. The overall picture is thus:

	Infinitive	Present	Preterite	Past Particple	
Type 1a	. (A - A - A):				
	græd-e	græd-e-r	græd	græd-t	'weap'
	løb-е	løb-e−r	løb	løb-e−t	'run'
	sov-e	sov-e-r	sov	sov-e-t	'sleep'
	komm-e	komm-e-r	kom <sup>35</sup>	komm-e-t	'come'
Type 1b	. (A - B - A):				
	bid-e	bid-e-r	bed	bid-t	'bite'
	flyd-e	flyd-e-r	flød	flyd-t	'flow'
	snyd-e	snyd-e-r	sned	snyd-t	'cheat'
	bed-e	bed-e-r	bad	bed-t	'pray, ask'
	giv-e	giv-e-r	gav	giv-e-t	'give'

The only difference between the imperative kom 'come' and the preterite kom 'came' is that the latter has Accent 1 (stød): [ | k m'], which might be taken as an indication that an underlying final consonant has been assimilated to the root consonant as the trace of a preterite ending, cf. 1.4.3.

<sup>&</sup>lt;sup>34</sup> The present tense form *har* 'has' is actually, historically, an abbreviation of a thematic formation, viz. *haver*, a form still found in poetic texts.

	-		٠,
	<b>f</b> -	•	,
- 1	•	7	۰.

	betyd-e	betyd-e-r	betød	betyd-e-t	'mean'
	få	få-r	fik	få-e-t	'get'
	gå	gå-r	gik	gå-e-t	'walk'
	le	le-r	1 <b>0</b>	le-e-t	'laugh'
	stå	stå-r	stod	stå-e-t	'stand'
Type 2	2a. (A - B - B):				
	flyv-e	flyv-e-r	fløj	fløj-e-t	'fly'
	ryg-e	ryg-e-r	røg	rog-e-t	'smoke'
	lyv-e	lyv-e-r	løj	løj-e−t	'lie'
	bliv-e	bliv-e-r	blev	blev-e-t	'remain, become'
	grib-e	grib-e-r	greb	greb-e-t	'grasp'
Type 2	2b. (A - B - C):				
	skær-e	skær-e-r	skar	skår-e-t	'cut'
	bær-e	bær-e-r	bar	bår-e-t	'carry'
	byd-e	byd-e-r	bod	bud-t	'offer'
	skyd-e	skyd-e-r	skød	skud-t	'shoot'
	frys-e	frys-e-r	frøs	fross-e-t	'freeze'
	drikk-e	drikk-e-r	dr <b>a</b> k	drukk-e-t	'drink'
	vind-e	vind-e-r	vand-t	vund-e-t	'win'

# The infinitive

The infinitive is formed by the ending -e [ $\partial$ ], e.g. lav-e 'make', except in athematic stems in a long vowel:

se [se']'see' dø [dø']'die' gø [gø']'bark' du [du'] 'function, be useful'

or abbreviated very frequent verbs such as have  $[hæ:v\partial]$  or [hæ'] 'have' and tage  $[tæ:j\partial]$  or [tæ'] 'take'.

This non-finite form of the verb is used in constructions with other verbs. It is first and foremost used with the auxiliary ville 'will' to form the periphrastic future:

Han vil se på den i morgen. 'He will have a look at it tomorrow'

Similarly with modal verbs, see below.

The infinitive is also used in downgraded predications with the causative verbs *lade* 'let' or *få til* 'make', see below, and sensory verbs in an "accusativus cum infinitivo" construction:

Vi så hende komme nede på gaden. 'We saw her arrrive down in the street' Vi hørte dem råbe inde ved siden af. 'We heard them yell next door'

Morphology 69

In all these cases the infinitive is joined directly to its governing verb. Turned into a noun phrase by the infinitive marker  $at [\land]$ , the infinitive occupies valence or adverbial slots in the clause as a dependent of both verbs and prepositions thereby creating a non-finite subordinate clause, i.e. a structure containing all kinds of material allowed by the valence and lexical content of the infinitive verb except for its subject, which is identical to either that of a superior verb or to its direct or indirect object (cf. Hansen 1970):

Hun, besluttede [at \_\_, flytte]. 'She decided to move'

Han, lovede [at \_\_, gøre det inden jul]. 'He promised to do it before Christmas'

Hun tvang ham, til [at \_\_, spise maden op]. 'She forced him to eat up the food'

Hun tillod ham, [at \_\_, købe en til]. 'She allowed him to buy one more'

# Modal content of the tense category

As seen above, the basic opposition within the tense system is an opposition between the present (indicative) and the preterite. As already realised by Wiwel (1901), cf. further Glismann (1986), Herslund (1988), Hansen and Heltoft (Forthc.: Ch. 6), this opposition is rather of a modal nature than a strictly speaking temporal, i.e. chronological, opposition.

Whereas one can perhaps maintain the view that the present always in some sense includes the moment of speech, it is difficult to assign anything but a vague meaning of distance to the preterite. This distance may of course be of a temporal nature, as in:

Sidste år var jeg to gange i Berlin. 'Last year I was twice in Berlin'

but in most cases the preterite is used to speak about non-present situations such as hypothetical, desired or imagined situations, so that the present could be said to denote **topical** the preterite **non-topical**, but also chronologically present situations:

Havde jeg bare en ordentlig ordbog. 'If only I had a proper dictionary'

Kunne vi så få lidt ro? 'Could we have some quiet now?'

Du havde vel ikke Egons adresse? 'You wouldn't happen to have Egon's address?'

Det var på tide vi fik noget at spise. 'It was time we got something to eat'

But the most typical and convincing piece of evidence of the non-topical as opposed to a past value of the preterite is offered by sentences like the following where the use of the preterite clearly is not an indication that the described relation no longer holds, but that it is in some sense distant and non-topical for the speaker. It is simply a case of spatial remoteness:

Er De blikkenslager? - Nej, hvorfor? - Jo, der holdt en VVS-bil længere opppe i gaden. 'Are you a plumber? - No, why? - You see, a plumber's car was parked further up the street'

Sidste år rejste jeg til Berlin. Byen var smukkere end jeg havde troet. 'Last year I went to Berlin. The city was prettier than I had thought'

# The perfect

The perfect has several uses which oppose it both to the present and to the preterite. It is formed with the auxiliary have 'have' or være 'be' and the past participle. The past participle is formed either as a thematic form from the present stem + -e-t, or as an athematic form, either present stem + -t, or from an ablauted stem, thematic -e-t or athematic -t:

Present	Preterite	Past Partici	iple
lav-e-r	lav-e-de	lav-e-t	'make, do'
spill-e-r	spill-e-de	spill-e-t	'play'
hent-e-r	hent-e-de	hent-e-t	'fetch'
spis-e-r	spis-te	spis-t	'eat'
læs-e-r	læs-te	læs-t	'read'
smag-e-r	smag-te	smag-t	'taste'
sidd-e-r	sad	sidd-e-t	'sit'
find-e-r	fand-t	fund-e-t	'find'
gør-r	gjor-de	gjor-t	'do'

The choice of auxiliary is lexically determined: all transitive and reflexive verbs, and the verb være 'be' itself select have, whereas blive 'remain, become' selects være. With verbs of motion, however, the choice is determined by the overall meaning of the construction. Since Danish does not distinguish between unaccusative and unergative verb lexemes (cf. Herslund 1993, 2000), this distinction is expressed in the perfect by choice of auxiliary. The same verb is thus used in an unaccusative (telic) meaning with the auxiliary være, in an unergative (nontelic) meaning when have is chosen (see 3.1.2. below):

Han er gået hjem. 'He has walked home'
Han har gået hele dagen. 'He has been walking all day'

Hun er svømmet ud til bøjen. 'She has swum out to the buoy'
Hun har svømmet rundt i bassinet. 'She has been swimming around in the pool'

The perfect is traditionally described as denoting a present situation as a result of a past activity:

Jeg har købt dem her hos grønthandleren. 'I have bought these at the greengrocer's'

Morphology 71

Du er kommet for sent. 'You have arrived too late'

But the perfect is also used in Danish in a modal sense as an evidential form denoting the present interpretation of traces of a past activity or action:

Tyven har stillet en stige op ad muren og har derefter brudt verandadøren op.
'The burglar has placed a ladder against the wall and has thereafter forced the balcony door open'

#### Modal verbs

A special class of verbs, the modal verbs (see Davidsen-Nielsen 1990, Brandt 1999, Sørensen 2001) have a special flexion and syntax. Different authors include different verbs in the class of modals, but the following series is common to most of them: *kunne* 'can', *skulle* 'shall', *måtte* 'may, must', *ville* 'will', *burde* 'ought'. In contradistinction to the English modals, they have a complete flexion (except for the imperative and perhaps the present participle) and enter into quite complex and elaborated verbal chains also with one another.

The morphology of the modal verbs is first and foremost characterised by their lack of the ending -(e)r in the present tense. Their preterite is a strong formation:

Infinitive	Present	Preterite	Past Participle
kunne	kan	kunne	kunnet
skulle	skal	skulle	skullet
måtte	må	måtte	måttet
ville	vil	ville	villet
burde	bør	burde	burdet <sup>36</sup>

The main function of the modal verbs is to create verb periphrases with an epistemic or a deontic meaning. In these expressions, the modal verb as an auxiliary is followed by the infinitive of the main verb:

Han kan være i Aarhus kl. 5. 'He can be in Aarhus at 5 o'clock'

The preterite forms were earlier written kunde, skulde, vilde, which clearly identifies them with the athematic preterite inflection. The orthographic reform of 1948 changed, rather ill-advisedly, these transparent forms into the current forms which are indistinguishable from the infinitive. This graphic lack of distinction between the infinitive and the preterite seems to be one of the sources of the rapidly spreading modern usage where a kind of serial construction replaces the infinitive of the modal verb in the present, cf. Han hader og skal tidligt op instead of the more conservative Han hader at skulle tidligt up 'He hates to rise early': the form skulle is apparently felt to be a preterite form.

The present forms are derived from the infinitive either by a u - a alternation, or an alternation between tense and lax vowel, see 1.1.1.: ville [ $vil\partial$ ] - vil [vel], burde [ $bu^rd\partial$ ] - bor [ $bo^r$ ]. A similar alternation is found in the verb vide 'know' vs. ved 'know-PRES'.

Han skal komme nu. 'He shall/must come now'
Han skal være i Aarhus. 'He is rumoured to be in Aarhus'

Such verb chains can be quite long, comprising several modal verbs:

Han må kunne ville det. 'He must be able to want (to do) it'

The modal verbs also form a perfect with the same values as above without any problem:

Han har kunnet gøre det. 'He has been able to do it'
Hun har måttet klare det alene. 'She has been obliged to cope with it alone'

Two of the modal verbs, kunne 'can' and ville 'will', are not only used as auxiliaries. They also retain their original transitive uses and can in fact have nominal objects of their own:

Han kan hele bogen udenad. 'He can (knows) the whole book by heart' Vi vil fred her tillands. 'We will (want) peace in this country'

Instead of an infinitive the modals *skulle* 'shall', *ville* 'will' and *måtte* 'must', can be followed directly by a telic adverbial or prepositional phrase. These are the subset of modal verbs which Sørensen (2001) qualifies as *be*-modals as opposed to the other, *have*-modals. As mentioned above, Danish verbs of motion are ambiguous and there is thus no telic verb lexeme corresponding to French *aller* or English *go*. When such a verb would be appropriate, i.e. when there is no mention of the manner of motion, the simple modal will suffice:

Jeg skal til tandlægen. 'I shall (am going) to the dentist'
Hun vil hjem. 'She will (wants to go) home'
Jeg må ud. 'I must (get) outside'

# 2.2.2. Voice

The Danish voice system comprises a passive, a middle and a causative.

### The passive

The passive has two different formations. There is a synthetic passive formation characterised by the ending -s in the infinitive, the present and the preterite<sup>37</sup>:

Morphology

73

	Infinitive	Present	Preterite	
Active	lav-e	lav-e-r	lav-e-de	
Passive	lav-e-s	lav-e-s	lav-e-de-s	

The same ending is found in a number of deponent verbs with an intransitive meaning: lykkes 'succeed', trives 'thrive', synes 'seem', grønnes 'become green', dages 'dawn', ynkes 'pity', længes 'be longing', væmmes 'be disgusted'. The ending also occurs with a reciprocal meaning in quite a number of verbs: mødes 'meet, skilles 'separate', skændes 'argue', enes 'agree'.

But the regular use of this morphological passive is in general and prescriptive utterances where it is used to convey what could be termed 'objective modality' (cf. Heltoft and Jakobsen 1996, Hansen and Heltoft Forthc.: Ch. 5): the point of view expressed is not that of the speaker, but that of a rule or a higher authority, or the narrator voice of fiction. There is thus a modal opposition within the passive between the objective modality of the synthetic form and the subjective modality of the periphrastic form, a predicative dynamic construction with *blive* 'become' and a stative with *være* 'be' + the past participle:

Porten lukkes kl. 11. 'The gate is/will be closed at 11 o'clock'

Skynd dig, porten bliver lukket nu. 'Hurry up, the gate is being closed now'

For sent, porten er lukket. 'Too late, the gate is/has been closed'

Æggene bringes langsomt i kog. 'The eggs must be slowly brought to the boil' Æggene bliver bragt i kog, hvis du tænder her. 'The eggs are brought to the boil if you switch on here'

Kisten fores nu ud af kirken. 'The coffin is now led out of the church'
Kisten bliver nu fort ud af kirken. 'The coffin is now being led out of the church'

The subtle difference between the two last examples is a distinction between the solemn reportage, almost as a piece of fiction, of a series of moves carried out according to a preestablished plan, and the neutral description of what is going on.

The modal character of the passive distinction is clearly brought out in combinations with modal verbs. A modal verb followed by the *blive*-passive expresses epistemic modality or personal will, i.e. subjective modality:

Hun må snart blive fyret. 'She may/must soon be fired (so it seems)'

Hun skal snart blive fyret. 'She will soon be fired (I'll see to it)'

Nu kan hønsene ikke længere blive spist af ræven. 'Now the hens can no longer be eaten by the fox (I have made a new fence)'

But the combination of a modal verb and the -s-passive conveys a deontic meaning or a

<sup>&</sup>lt;sup>37</sup> Most strong preterites have however no synthetic passive formation, e.g. fik 'got' - \*fikk-e-s vs. blev fået 'was got'. The modal verbs have only the synthetic passive in the infinitive: Lektien skal kunne-s til i morgen. 'The homework must be could (assimilated) by tomorrow'.

meaning of conditioned possibility or necessity, i.e. objective shades of modal meaning<sup>38</sup>:

Hun må snart fyres. 'She must soon be fired (her work is awful)'
Hun skal snart fyres. 'She will soon be fired (I've heard it from the managment)'
Nu kan hønsene ikke længere spises. 'Now the hens can no longer be eaten (they have got some kind of disease)'

The whole passive system can be displayed as follows:

	Subjective	Objective
Dynamic	blive V(-e)-t	
		V(-e)-s
Static	være V(-e)-t	

A further kind of passive, the få-passive, is treated together with causatives below.

#### The middle

The middle voice is a construction with the reflexive pronoun, 3. Person sig (in the other persons, the reflexive pronoun is the same as the personal pronoun, see 2.1.2.1.). Since the passive ending -s etymologically is an enclitic reflexive pronoun, one can actually distinguish three degrees of reflexivity: a (passive) deponent in -s, a middle with sig, and a reflexive proper with the addition of the emphatic selv (cf. Hvilshøj 1999). Not all verbs do, of course have all three possibilities, but the verb slå 'hit' is illustrative:

Deponent	Middle	Reflexive Han slår sig selv.		
Han slås.	Han slår <b>sig</b> .			
'He fights'	'He gets hurt'	'He hits himself'		

As can be seen, it is the Reflexive which corresponds most directly to English constructions with Pro-self. The Middle, with the simple, unstressed reflexive pronoun, typically corresponds to the English intransitive Middle and conveys a meaning of non-distinctibility between subject and object:

Han vasker sig hver aften. 'He washes every evening'
Han barberer sig hver tirsdag. 'He shaves every Tuesday'
Hun lagde sig på sengen. 'She lay down on the bed'
Forbryderen havde hængt sig. 'The criminal had hanged himself'
Hun så sig i spejlet. 'She looked at herself in the mirror'

Morphology 75

Many Middles are lexicalised expressions: glæde sig 'look forward to', skamme sig 'be ashamed', skynde sig 'hurry', hygge sig 'have a nice time', betakke sig 'say no thanks'.

The reflexive proper, on the other hand, is a regular transitive construction where the subject (the Agent) and the object (the Patient) happen to denote the same entity. This form is therefore used when one does to oneself what another should do or has the habit of doing:

Han vasker sig selv nu. 'He washes himself now (he has grown big)'

Han barberer sig selv hver tirsdag. 'He does his own shaving every Tuesday (his barber is at bingo)'

Hun lagde sig selv på sengen. 'She laid herself down on the bed (after having tugged the children)'

Bødlen havde hængt sig selv. 'The hangman had hanged himself (there was so much confusion in the room)'

Hun så sig selv i spejlet. 'She discovered herself in the mirror'

#### The causative

Apart from lexicalised causativity in certain verb pairs (infinitive and preterite):

Uncausative	Causative	
ligge - lå	lægge - lagde	'lie - lay'
sidde - sad	sætte - satte	'sit - set/put'
stå - stod	stille - stillede	'stand - put'
springe - sprang	sprænge - sprængte	'jump, explode - blow up'
synke - sank	sænke - sænkede	'sink - sink'
hænge - hang	hænge - hængte	'hang - hang'

the patterns of which are no longer productive, Danish has three productive causative formations. One with the verb *lade* 'let' + the Infinitive, two with the verb *få* 'get' + the Past Participle or the Infinitive preceded by the preposition *til* 'to'. The *lade* construction can be illustrated by examples like the following:

```
Han lod søsteren komm-e. 'He let the sister come'
Han lod vinduerne mal-e. 'He let the windows paint'
```

As can be seen, this construction exhibits an ergative organisation of the infinitive clause: the intransitive subject and the transitive object, both preceding the infinitive, are treated alike (cf. Herslund 1986). It is remarkable, and fully consistent with the ergative interpretation, that the passive infinitive (-s) contrary to Swedish does not occur in Danish in these structures.

The first fa construction, with the Past Participle, is also organised as an ergative construction, but it occurs only with transitive verbs:

<sup>38</sup> See, however, the discussion in Brandt (1999:107 ff.).

Han fik vinduerne mal-e-t. 'He had the windows painted'

This construction then appears as a kind of causative counterpart of the *blive*-passive, cf. the following:

Bilen blev repareret. 'The car was repaired'
Han fik bilen repareret. 'He got the car repaired'

Historien blev fortalt. 'The story was told'
Han fik historien fortalt. 'He got the story told'

In both ergative-like constructions, an agent can be added as the same prepositional phrase as the one used in passive constructions, viz. af + N 'by + N':

Han lod vinduerne mal-e af en tømrer. 'He let the windows paint by a carpenter' Han fik vinduerne mal-e-t af en tømrer. 'He had the windows painted by a carpenter'

The last causative construction is a regular prepositional infinitive construction with the marker at 'to' following the direct object of fa, corresponding fairly closely to the English make causative:

Han fik en tømrer til at male vinduerne. 'He got a carpenter to paint the windows'

# 2.2.3. Verbal Modifiers

The simple verb can be expanded in different ways, most noticeably in converb and serial verb constructions.

#### Converbs

One of the central uses of the Present - or rather the contemporative - Participle in -ende is its use as a converb with a small group of motion or position verbs. The most common of these are the motion verb komme 'come', and the position verb blive 'remain':

Han kom løbende. 'He came running'
Hun blev siddende. 'She remained seated' Han blev liggende. 'He remained lying'

Morphology 77

Other combinations seem rather to involve the participle as a free predicative complement to the subject:

Hun løb skrigende bort. 'She ran screaming away'

Hæren drog hærgende gennem landet. 'The army marched ravaging through the country'

#### Serial verbs

Danish exploits to a large extent grammaticalised coordinative constructions to form verbal chains with a common subject and mood-tense agreement, i.e. the two verbs of the chain must have the same mood and tense in a kind of cosubordination. It is again verbs of motion or position which constitute the point of departure of such constructions (cf. Jensen 1998):

#### Verbs of Motion

Han kom og skældte ud. 'He came and yelled at us' (Pret + Pret)

Han går altid og brokker sig. 'He always walks and complains' (Pres + Pres)

Kom og sid ned. 'Come and sit down' (Imp + Imp)

#### Verbs of Position

Hun sidder og syer. 'She sits and sews' (Pres + Pres)

Han lå og læste. 'He lay and read' (Pret + Pret)

Stå her og kig på duerne. 'Stand here and watch the pigeons' (Imp + Imp)

As can be seen the durative meaning of such constructions corresponds fairly well to the progressive aspect of English.

The tight cohesion between the thus cosubordinated verbs is also illustrated by their capacity to share a single auxiliary. And in that case the most frequent, default, auxiliary, have 'have', can be chosen even if the first verb (the verb of motion) selects være 'be':

Han har gået ind og spærret vejen. 'He has gone in and blocked the road'

#### Centaurs

The Danish verbal system contains a further form, a verbal noun in -e-n, which is seldom or never mentioned in Danish grammars. These forms have been baptised centaurs by Hansen and Heltoft (1994) because their left side (their front) is nominal, whereas their right side (their back) is verbal. This amounts to saying that such verbal nouns, regularly formed by any verb, take nominal determiners, such as demonstratives and possessives, and modifiers such as adjectives to the left, but verbal complements to the right:

<sup>&</sup>lt;sup>39</sup> This causative passive should be distinguished from an active construction with få as an auxiliary and a resultative meaning. This construction has two different word orders, cf. 3.2.1., one of which is identical to that of the causative: Endelig fik han fortalt historien færdig/Endelig fik han historien fortalt færdig. 'He finally succeeded in finishing his tale'. This active construction differs from the causative passive however insofar as in the active 'he' is the tale teller.

Denne evindelige råb-en og skrig-en går mig på nerverne. 'This eternal shouting and screaming gets to my nerves'

Jeg kan ikke holde hans snøft-en ud. 'I can't stand his snuffling'

There is one restriction on the verbal complementation however, which is that the centaur is intransitive insofar as transitive centaurs only occur in detransitivised constructions such as the antipassive or the incorporation constructions, cf. 3.1.4. below. Regular transitive constructions are excluded:

Jeg kan ikke forstå denne skyd-en på journalisterne. 'I can't understand this eternal shooting at the journalists'

\*Jeg kan ikke forstå denne skyden journalisterne. '... shooting the journalists ... '
Hans evindelige læs-en avis irriterer mig. 'His eternal reading newspaper annoys me'
\*Hans evindelige læsen avisen irriterer mig. '... reading the newspaper ... '

#### 3. SYNTAX

The relational syntax works intimately together with the prosodic and topological structuring of the clause. Since only a minor part of Danish morphology is directly connected to syntactic functions - a proper case inflection, for instance, is only found in the personal pronouns (2.1.2.1.) - Danish syntax relies heavily on the linear ordering (topology) and the prosodic structuring of the phrase and clause constituents. The major grammatical relations (GR) such as subject, object and indirect object (adject) have canonical (default) positional slots in the overall topological organisation of the clause, and the interplay between relational and topological syntax is underpinned by the prosodic articulation of the sentence into feet (see 1.4.4.). Beyond the default organisation into feet, stress reductions and additions may signal the local creation of syntactic units as changes in the neutral syntactic lay-out.

Especially the unit stress (1.4.2.) is an important factor in the syntactic organisation of the clause. According to Rischel (1983) the stress reduction characteristic of unit stress is a signal of the hierarchical patterning within the word as well as between words. Unit stress is thus a signal that a, possibly discontinuous, phrase is stressed as a single word, which means that this accentual unit conveys either a single concept, e.g. the presence of a complex predicate, or a pragmatically non-salient concept, cf. Scheuer (1995). This is especially clear in combinations of verbs and bare nouns (incorporation, see 3.1.4.) and verbs and postverbal particles (ib.) where intervening material does not block the stress reduction on the verb signalling that the rest of the predicate is yet to come:

Børge skal ud og <sub>0</sub>købe | bil. 'Børge is going out to buy (a) car'

Børge <sub>0</sub>køber altid | bil om sommeren. 'Børge always buys (a) car in the summer'

Karen orendte hjem. 'Karen ran home'

Karen osendte børnene hjem. 'Karen sent the children home'

The most important cases of unit accentuation are the following. The common denominator of all is the iconic relation between an accentual unit and a single, perhaps complex, concept. Noun phrases (<sub>0</sub>Determiner + |Noun), except those with demonstrative determiners or numerals, and prepositional phrases with light (monosyllabic) prepositions (<sub>0</sub>Preposition + |Noun Phrase) exemplify this:

Det er oen | flodhest. 'It's a hippo'
Giv hende olidt | mælk. 'Give her some milk'
Vi er opå | landet. 'We are in the countryside'

Personal pronouns, unless emphatic, are also proclitic to the finite verb:

Jeg | kommer i morgen. 'I'll come tomorrow'

"Hun | sover i stuen. 'She sleeps in the drawing room'

As for verbs unit accentuation is found, apart from the two cases mentioned above, in the creation of complex verbal expressions such as auxiliary constructions (<sub>0</sub>Auxiliary + | Verb) and accusative plus infinitive constructions:

Hun ohar levet godt. 'She has lived well'
Du oskal skynde dig. 'You must hurry up'

Vi ohorte børnene synge. 'We heard the children sing' Han olod dyrene løbe. 'He let the animals run'

But regular infinitive constructions with the infinitive marker at 'to' keep the accentual identities of the two components intact:

Han | provede at | lobe. 'He tried to run'

# 3.1. Sentence Types and Grammatical Relations

The Danish clause is constructed, as any "standard average European language", on a nominative-accusative basis, i.e. intransitive and transitive subjects are treated alike and kept apart from objects. Besides the two central GRs, subject and object, the valence specifications of verbs also comprise the indirect object and different prepositional, typically locative complements. In the present context, however, we shall treat the indirect object and such valence bound complements as exponents of a single GR, called the adject, cf. Herslund and Sørensen (1993, 1994): the semantic core content of this relation is a locative relation denoting that some entity is being placed relatively to some other entity. These two entities happen always to be the adject and the intransitive subject or the object, never the transitive subject:

# Intransitive

# Transitive

Hun<sub>S</sub> gik til byen<sub>A</sub>.
'She went to town'

Hun sendte ham<sub>O</sub> til byen<sub>A</sub>.

'She sent him to town'

Hun gav ham<sub>A</sub> pengene<sub>O</sub>.

'She gave him the money'

As a special feature of Danish syntax one can further identify two kinds of demoted GRs, the co-subject and the co-object, see 3.1.5.

The major distinction in clause structure is the distinction between intransitive, including copular, and transitive clauses. The valence specifications of Danish verbs thus create four sentence types, two transitive and two intransitive patterns, both without and with the third valence bound complement, the adject, which in relational terms also comprises the

Syntax

81

subject and object complements:

	Intransitive	Transitive
- Adject	S + V	S + V + O
	Hun løber.	Hun jager dyrene.
	'She runs'	'She chases the animals'
+ Adject	S + V + A	S + V + O + A
	Hun går til købmanden.	Hun sender drengen til købmanden.
	'She walks to the grocery'	'She sends the boy to the grocery'
	Hun er sur/på landet.	De gjorde hende sur/til leder.
	'She is cross/in the countryside'	'They made her cross/(their) leader'
		S + V + A + O
		Hun sender drengen en gave.
		'She sends the boy a gift'

These fundamental patterns, however, are subject to a whole series of reorganisations and alternations which create different derived, especially intransitive structures, thereby blurring the picture. These reorganisations and alternations also rely heavily on the creation of complex predicates signalled by unit stress, as discussed in 3. above.

# 3.1.1. Copular Clauses and Predicative Complements

One reason for assuming that subject and object complements relationally have the same kind of relation as, typically, locative complements, i.e. the adject relation, is that both types of complements often are realised as prepositional constructions. In examples like the following it is indeed difficult to draw a precise dividing line between the (obvious) subject complements such as adjectives and more adverbial-like prepositional expressions. In all cases, however, what the verb *være* 'be' does is to establish a relation between the subject and the subject complement, i.e. to place the subject either as the carrier of some property or quality, as a member of a category, or as an entity in a place. And in all cases the verb and the following complement have unit stress:

```
Hun oer | lykkelig. 'She is happy'

Hun oer | journalist. 'She is a journalist'

Hun oer på | spanden. 'She is in trouble (lit. 'on the bucket')'

Hun oer med | barn. 'She is pregnant (lit. 'with child')'

Hun oer i | fængsel. 'She is in jail'

Hun oer på | landet. 'She is in the countryside'

Hun oer i | København. 'She is in Copenhagen'
```

Other verbs, more or less modal or aspectual variants of være 'be', such as (epistemic) virke

'seem' or inchoative blive 'become', are mostly followed by adjectives or bare nouns:

```
Hun ovirker | lykkelig. 'She seems happy'
Hun obliver | journalist næste år. 'She becomes a journalist next year'
```

The object complement, the transitive counterpart of the predicative subject complement, is besides adjectives realised as a prepositional construction:

```
Det ogjorde hende | lykkelig. 'That made her happy'

Det ogjorde hende til | journalist. 'That made her a journalist'

Han ogjorde hende med | barn. 'He made her pregnant'
```

Again the limit between predicative and locative constructions is all but crystal clear because very often rather concrete locative verbs are used corresponding to the copular clauses above:

```
Det osatte hende i |vildrede. 'That put (lit. 'sat') her at a loss' De osatte hende i |fængsel. 'They put (lit. 'sat') her in jail'
```

We thus assume that predicative complements are relationally exponents of the adject relation, i.e. they are co-predicates to the main predicate, the verb, and they thus differ topologically from ordinary locative complements by occupying the co-predicate slot, cf. 3.2.1. below.

### 3.1.2. Intransitive Clauses: Unaccusative and Unergative

As stated above in 2.2.1.2., Danish verb lexemes are not in general classified as telic and atelic. In intransitive verb stems this amounts to the observation that the unaccusative - unergative distinction does not define two sets of lexemes, but that the distinction is made within the individual lexemes as two different morpho-syntactic uses (cf. Herslund 1993, 2000). In fact, apart from a small set of unaccusative verbs such as *komme* 'come',  $d\theta$  'die', forsvinde 'disappear' and tage afsted 'leave', all motion verbs are indifferent to the distinction which is accordingly expressed by choice of auxiliary and/or telic adverbs (as adjects or as copredicates in a complex predicate). Any motion verb can be used in a telic sense (unaccusative) by being inflected in the perfect with the auxiliary være 'be' and/or by the addition of a telic adverb (cf. 2.1.4.4.) or an equivalent expression such as a prepositional phrase. When used in an atelic sense (unergative), the auxiliary is the default choice, have 'have', and no telic adverbs may of course occur. Corresponding to this, the telic reading can be accompanied by time adverbs in pa 'in', while atelic readings select time adverbs in i 'for', or equivalent non-limitative expressions:

a. Hun er gået hjem på en time. 'She has walked home in an our'
De er danset ind i salen. 'They have danced into the hall'

Syntax

Katten er løbet væk. 'The cat has run away'

b. Hun har gået hjemme i en time. 'She has been walking at home for an hour'

83

De har danset inde i salen. 'They have been dancing inside the hall' Katten har løbet rundt. 'The cat has been running around'

The deep-rooted nature of this phenomenon is also revealed by the fact that even a born unaccusative verb like  $d\theta$  'die' can be forced into an unergative construction and consequently be inflected with have:

Her har mennesker levet og døet i tusinder af år. 40 'Her people have lived and died for thousands of years'

## 3.1.3. Transitive Clauses: Simple and Ditransitive

Most transitive verb stems are simple transitive, i.e. they combine with an object phrase, but most of them are subject to the alternations described in the next section. A further set of transitive verbs, however, are ditransitive (trivalent) in the sense that they combine with an object and an adject, cf. 3.1., which in some cases takes over the object relation (the traditional indirect object) while the former object appears as a second object (or an object "chômeur"). This is the double object construction (cf. Herslund 1986a), which is also known from the transformational literature as "dative shift" or "dative alternation":

Han sendte cigarer til chefen. 'He sent cigars to the executive' Han sendte chefen cigarer. 'He sent the executive cigars'

This alternation is typical of verbs of giving, sending and communicating and their negative counterparts: give 'give', sende 'send', række 'pass', bringe 'bring', fortælle 'tell', skrive 'write', fratage 'confiscate'. Such verbs often combine with an adject with a clear locative meaning, one with a less clearly locative meaning, and the double object construction where focus is rather on the receiver: it is the recipient which has the primary GR object, and semantically this constituent is seen as a secondary subject. This is the defining feature of the construction: the double object construction is chosen when the adject constituent is presented as the subject of a secondary predication (cf. Diderichsen 1946, Herslund 1986a, Herslund and Sørensen 1994). The three degrees of the adject construction - the two prepositional constructions, locative and recipient, and the double object construction - thus constitute the following hierarchy, where the locative degree is signalled by unit stress:

<sup>&</sup>lt;sup>40</sup> In this construction, the past participle, which is normally the (suppletive) adjective *død* 'dead', is recreated as a regular thematic formation, *dø-e-t* 'died'.

```
Hun sendte pakkerne til Nordpolen. 'She sent the parcels to the North Pole' Hun sendte pakkerne til Karen. 'She sent the parcels to Karen' Hun sendte Karen pakkerne. 'She sent Karen the parcels'
```

The subject-like nature of the indirect object is among other features revealed by the regularly occurring use of the reflexive determiner on the object refering to the indirect object. Normally the reflexive possessive determiner refers only back to the subject:

```
Filmen "Intermezzo" gav Ingrid Bergmann, sit folkelige gennembrud, 
'The film "Intermezzo" gave Ingrid Bergmann her-REFL popular break-through' 
Sydafrika har givet Namibia, sin frihed, tilbage. 
'South Africa has given Namibia its-REFL freedom back'
```

Similarly with the reflexive pronoun sig selv 'him/herself' which can occur as a free adjunct in the double object construction refering back to the indirect object, not the (primary) subject of the clause:

```
Skattelettelsen vil give hver borger, 1000 kr. til sig selv, 'The tax reduction will give every citizen 1000 DKK to him/herself'
```

Among the adjects in trivalent constructions, the (traditional) indirect object thus emerges as a signal of secondary subject status. This status is further enhanced by the fact that it is always possible to construct a sentence with the verb fa 'get, receive' which, so to speak, realises the secondary predication as an autonomous structure (cf. Heltoft 2001b, c):

```
Hun sendte Karen pakkerne. 'She sent Karen the parcels' Karen fik pakkerne. 'Karen got the parcels'
```

### 3.1.4. Transitivity Alternations

As stated in 3.1.2. above, Danish verb stems are not in general inherently either telic or atelic. Rather they are neutral with regard to this distinction, which is expressed by different syntactic constructions. From a global point of view there is a strong correlation between transitive construction and telicity, intransitive construction and atelicity. The transitivity alternations to be discussed in this section are of two kinds: intransitivising, i.e. prepositional and incorporation constructions, and transitivising, i.e. applicative, prefixing and particle constructions. A transitive verb stem like *skrive* 'write' thus appears in a number of transitive (telic) and intransitive (atelic) constructions:

#### Transitive (telic)

skrive en bog 'write a book'

Syntax

```
skrive bogen igennem 'write the book through' skrive bogen færdig 'finish writing the book (lit. 'write the book finished')'
```

85

#### Intransitive

```
skrive på en bog 'be writing a book'
skrive bøger 'write books (i.e. be a book-writer)'
```

# Prepositional constructions: the antipassive

The most general and widespread alternation is the alternation between a simple transitive construction and an intransitive, prepositional construction of the same verb (see Herslund 1993, Durst-Andersen and Herslund 1996). The most used preposition is på 'on', but other prepositions are also used, sometimes different prepositions with the same verb producing different shades of meaning.

Though there are inherently telic verbs which only accept the plain transitive construction, most verbs seem to be neutral in the sense explained above and thus accept both constructions. Inherently telic verbs often have neutral counterparts which then exhibit the alternation:

Telic	Neutral	
bryde + N	brække + N - brække på + N	'break'
krumme + N	bøje + N − bøje på + N	'bend'
læge + N	kurere + N - kurere på + N	'heal, cure'

A synonym of the last pair such as helbrede also has the alternation:

Denne læge helbreder alle. 'This doctor cures everyone'

Denne læge helbreder på både dyr og mennesker. 'This doctor cures (on) both animals and humans'

As said, most transitive verbs are subject to the alternation:

Kosakkerne skød tartarerne. 'The Cossacks shot the Tartars' Kosakkerne skød på tartarerne. 'The Cossacks shot at the Tartars'

Peter læste bogen. 'Peter read the book'
Peter læste i bogen. 'Peter read in the book'

Peter læste sine lektier. 'Peter did his homework'

Peter læste på sine lektier. 'Peter looked over his homework'

Karen drejede knappen. 'Karen turned the button'
Karen drejede på knappen. 'Karen turned on the button'

The telic - atelic distinction between the two constructions is brought out clearly by the two kinds of time adverbials the two constructions combine with:

Han skrev bogen på et år. 'He wrote the book in a year'
Han skrev på bogen i et år. 'He was writing Prep the book for a year'

De byggede huset på et år. 'They built the house in a year'
De byggede på huset i et år. 'They were building Prep the house for a year'

The atelic nature of the prepositional construction makes it eminently compatible with the serial verb constructions (cf. 2.2.3.), whereas the telic, transitive, construction produces a kind of contradictory reading without perhaps being downright agrammatical:

Karen sad og læste i en bog. 'Karen was sitting reading in a book' ?Karen sad og læste en bog. 'Karen was sitting reading a book'

The intransitive status of the atelic (prepositional) construction is signalled, apart from the use of a preposition itself, by the use of the auxiliary *være* 'be' with verbs meaning 'beginning, continuing and ending'. The transitive construction can only have *have* 'have':

Han har begyndt kapitlet. 'He has started the chapter'
Han er begyndt på kapitlet. 'He has started Prep the chapter'

Han har fortsat sine studier. 'He has continued his studies'
Han er fortsat med sine studier. 'He has continued Prep his studies'

Han har sluttet sit vrøvl. 'He has finished his nonsense'
Han er ophørt med sit vrøvl. 'He has finished Prep his nonsense'

Typologically speaking, the combined features of atelicity and intransitivity, combined with the generality of the phenomenon, make the Danish prepositional construction look very much like the antipassives of ergative languages. In both cases in fact, what is important is the description of an agent involved in some activity, whereas the patient is peripheral, not totally, but perhaps iteratively affected, or it might be totally non-existent or only existent in the mind of the speaker/subject. The meaning of a sentence like the following:

Jeg skriver på en roman.

Syntax 87

is thus something like: 'I am currently engaged in the activity of writing a novel', which, however, does not imply that I have finished the first line yet.

### Incorporation

Another intransitivising atelic construction is incorporation, i.e. the combination of a transitive verb stem and a bare noun into a complex predicate, signalled as such by unit stress (cf. 1.4.2. and 3.):

Han | læser a | visen. 'He is reading the newspaper'

Han | læser i a | visen. 'He is reading Prep the newspaper'

Han <sub>0</sub>læser a | vis. 'He reads (a) newspaper'

In a typological perspective the Danish incorporation construction exhibits the same features as have been found characteristic of incorporation in other languages (see Mithun 1984): there is in general a phonological and/or morphological reduction of the two components - in Danish the verb loses its stress and the noun its inflection. The overall meaning of the construction is one of habituality, genericity or rituality, which is also found in the Danish construction (see Thomsen 1991, Forthc., Herslund 1995a, Scheuer 1995).

The basic expression feature of the construction is unit stress and as many constituents as permitted by the slots between the verb slot and the co-predicate slot, see 3.2. below, can in fact intervene between the verb (the predicate) and the noun (the co-predicate), except of course a direct object:

Karen <sub>0</sub>læser altid om søndagen omhyggeligt a vis for at finde en mand.

'Karen always on Sundays reads-newspaper carefully in order to find a husband'

But in actual performance, of course, the tendency is to keep the two components as close as possible (Thomsen Forthc.):

Du skal ikke odrikke | vand. 'You shall not drink water'

Vi omister | penge på den handel. 'We are loosing money in that deal'

Børnene oleger indi anere. 'The children are playing Indians'

Kongen obærer krone. 'The king wears crown'

Den obruger ben zin. 'It functions on gasoline'

### The applicative construction

The first exclusively transitivising construction, i.e. the opposite operation from the alternations seen so far, is what can be labelled the applicative construction. This is the construction whereby a locative complement is turned into a direct object, also known in the literature as the "spray paint" alternation, see Herslund (1995b). As in many, especially

African, languages Danish has for some verbs the following alternation:

- a. Han plantede træer i haven. 'He planted trees in the garden'
- b. Han beplantede haven med træer. 'He planted the garden with trees'

whereby a locative of the plain transitive clause becomes the direct object of the derived (applicative) clause. In most cases, the applicative derivation is signalled, as in the example, by the prefix be-. The meaning af the applicative clause as opposed to the plain transitive is that instead of being the place something happens, a., the relevant constituent is viewed as directly and totally involved in the situation: in b. the garden becomes in fact full of trees, or at least trees are presented as a predominant feature of the garden.

This construction is very productive with the prefix be- whose core meaning is that of transitivising:

Han skrev bogstaver på papiret. 'He wrote letters on the paper'
Han beskrev papiret med bogstaver. 'He wrote-Appl the paper with letters'

Han malede engle på lærredet. 'He painted angels on the canvas'
Han bemalede lærredet med engle. 'He painted-Appl the canvas with angels'

Also other, this time directional, prefixes can "applicativise" the verb:

Han borede kniven gennem tæppet. 'He pierced the knife through the rug' Han gennemborede tæppet med kniven. 'He pierced the rug with the knife'

De pladrede mudder på gulvet. 'They splattered mud unto the floor'
De overpladrede gulvet med mudder. 'They splattered the floor with mud'

Only a handful of non-derived verbs have this alternation (see Herslund 1995b: Appendix):

De læssede hø på vognen. 'They loaded hay on the wagon' De læssede vognen med hø. 'They loaded the wagon with hay'

Han fyldte vand i tønden. 'He filled water into the barrel' Han fyldte tønden med vand. 'He filled the barrel with water'

Han smurte mayonnaise på brødet. 'He smeared mayonnaise onto the bread' Han smurte brødet med mayonnaise. 'He smeared the bread with mayonnaise'

The telic nature of the applicative clause is revealed by the use of time adverbials in på 'in':

Syntax 89

Han læssede hø på vognen i en time. 'He loaded hay on the wagon for an hour' Han læssede vognen med hø på en time. 'He loaded the wagon with hay in an hour'

For the analysis of the demoted object, the med 'with' complement, see 3.1.5. below.

## Prefixation

As in the applicative construction, the prefixation of a verb stem produces a transitive, and therefore telic verb. This is true both of intransitive verbs like *arbejde* 'work' and transitive (but neutral) verbs like *læse* 'read':

De arbejdede i en time. 'They worked for an hour'

De udarbejdede planen på en time. 'They worked out the plan in an hour'

De gennemarbejdede planen på en time. 'They worked through the plan in an hour'

Hun læste i en time. 'She read for an hour'
Hun gennemlæste bogen på en time. 'She read the book through in an hour'

# Postverbal particle constructions: suffixation

The prefixation of a verb stem often alternates with a construction where the "former" prefix occurs as a postverbal particle, see Herslund (1984). This is never possible with the light prefixes such as *be-*, *er-*, *for-*, cf. 1.4.2. and 1.4.3.2., but with heavy prefixes, often identical to prepositions or directional particles, there is a systematic alternation in the sense that the construction where the prefix has become a postverbal particle - a "suffix" as it were - often has a more concretely spatial meaning than the prefixed verb (cf. 1.4.3.2. above):

udløbe 'expire'løbe ud 'run outside'udsætte 'postpone'sætte ud 'put outside'opstille 'nominate, erect'stille op 'place upright'nedlægge 'abolish'lægge ned 'lay down'udånde 'expire'ånde ud 'breathe out'

This difference, which is not always crystal clear - in fact the tendency of the contemporary language seems to be to prefer the suffixation construction - is further illustrated by examples like the following. The unitary status of verb + suffix is signalled iconically by unit stress:

Ministeriet | udsendte en skrivelse. 'The ministry issued a letter'

Bonden osendte drengen | ud i marken. 'The farmer sent the boy out into the field'

De | fremførte deres klager. 'They presented their complaints' Han førte tropperne | frem. 'He led the troops forward'

De | nedtog ham fra korset. 'They took him down from the cross' De otog den | ned fra hylden. 'They took it down from the shelf.

As appears from these examples, the postverbal particle (the suffix) always follows the object whether this is a noun phrase or a pronoun. This is contrary to Swedish where the particle always precedes the object, and Norwegian which has both solutions.

Also the suffix construction, being transitive, has a clear telic meaning:

De rev huset ned på en uge. 'They demolished the house in a week'
Hun syede kjolen om på et øjeblik. 'She re-sewed the dress in a moment'

Whereas the infinitive and the finite forms of the verb have this alternation, only the prefix occurs with an attributive past participle and derived nominals:

det nedrevne hus 'the demolished house'
nedrivningen af huset 'the demolition of the house'

The verb + particle construction can itself be intransitivised by the antipassive construction:

Han flyttede kasserne rundt. 'He moved the boxes around'
Han flyttede rundt på kasserne. 'He moved around Prep the boxes'

De rev huset ned. 'They demolished the house'

De rev ned på huset i en uge. 'They were pulling down the house for a week'

And even inherently telic verbs such as *myrde* 'murder' can, when enlarged by a particle such as *løs* 'away', enter this construction:

Diktatoren myrdede befolkningen. 'The dictator murdered the population'
Diktatoren myrdede løs på befolkningen. 'The dictator slaughtered away Prep the population'

The suffixation construction is clearly related to the construction with an object and an object complement. In both cases it seems that the adject relation (cf. 3.1.) has been absorbed by the verb thereby creating a complex predicate consisting of verb + particle or verb + predicative complement. In fact both occupy the co-predicate slot in the sentence schema, see 3.2. below:

Han malede skiltet over. 'He painted the sign over' Han malede skiltet rodt. 'He painted the sign red'

Syntax 91

#### 3.1.5. Demoted Grammatical Relations

One particular feature of Danish syntax is the special treatment of the central clause functions, subject and object, which are sometimes demoted and consequently expressed adverbially or in other ways signalling their demoted status. The cases at hand are co-subject and co-object, formal subject and object, and the presentational construction.

### Co-subject and co-object

The label 'co-subject' goes back to the 18th Century grammarian Høysgaard (1752), who spoke about "consubjectum" in cases like the following, where a demoted subject is expressed as an (adverbial) prepositional phrase with *med* 'with' (cf. Hansen 1971, Heltoft 2001b, c):

Peter spiller bold med Ole. 'Peter plays ball with Ole'
Hunden logrer med halen. 'The dog wags its tail'
Det er dejligt med et bad om aftenen. 'A bath is nice in the evening'

Whereas the first example looks very much like a coordinative structure, where the med-phrase can be a free adjunct or a valence complement as in:

Peter skændes med Ole. 'Peter argues with Ole'

the second and third cases are more original, autonomous syntactic constructions. A central feature of Danish syntax is that the semantic role Agent is never realised as the object relation in a simple (monoverbal) clause. That is why there is no 'The sergeant marched the recruits' in Danish (cf. Heltoft 2001c). In such cases a co-subject construction must be chosen:

Sergenten ekserserede med rekrutterne. 'The sergeant drilled the recruits' Slangen rasler med halen. 'The snake rattles its tail'

The third case is a case of extraposition, where the formal subject det 'it' takes over the subject relation and the "former" subject then is realised as a med-phrase:

Det er dyrt med taxa. 'It is expensive (to take) a cab'

Det er rart med solskin. 'It is nice (to have) sunshine'

A special version of this construction is found in clauses with verbs meaning 'swarm'or the like, which have a kind of applicative construction where a locative becomes the subject and the former subject a *med*-phrase. This locative can then itself be redemoted to a locative by the formal subject *det* 'it':

Folk myldrer i haven. 'People swarm in the garden'

Haven myldrer med folk. 'The garden swarms with people'

Det myldrer med folk i haven. 'It swarms with people in the garden'

Just as the subject can be demoted to co-subject, so can the object. And this is what happens in the applicative construction (cf. above), where the widespread interpretation of the with-phrase as an instrumental phrase probably is not viable (cf. Herslund 1995b):

Han fyldte vand i tønden. 'He filled water into the barrel' Han fyldte tønden med vand. 'He filled the barrel with water'

## Formal subject and object

As seen above, the formal subject det 'it' occurs in extraposition constructions with the cosubject in med. It also produces constructions where the subject is simply extraposed. This happens mostly with non-prototypical subjects such as infinitive clauses:

At spille golf er interessant. 'To play golf is interesting'

Det er interessant at spille golf. 'It is interesting to play golf'

The parallel construction with the object under similar circumstances is almost compulsory since in most cases the infinitive is postponed following a principle of increasing weight of constituents:

\*? Jeg finder at spille golf interessant. 'I find to play golf interesting'
Jeg finder det interessant at spille golf. 'I find it interesting to play golf'

### The presentational construction

The last demotion construction to be mentioned is the presentational "there-insertion". This construction produces what could be called a thetic clause, i.e. the subject - predicate is presented as an indivisible whole after the presentational der 'there'. As in other languages with similar constructions, the presentational construction only occurs with intransitive verbs, and the subject is most often indefinite (cf. Karrebæk 2001). In this construction the demoted subject occupies the object slot, see 3.2. below:

Der kom en mand gående på stranden. 'There came a man walking on the beach'
Der løb nogle børn rundt og legede. 'There ran some children around playing'
Der brænder en ild. 'There burns a fire'

As expected, the thetic nature of the clause, i.e. the indivisibility of subject and predicate, can be further signalled by unit stress (cf. 3.1.) and incorporation of the intransitive subject when this is possible, i.e. when the demoted subject is a bare noun:

Syntax

93

Der okommer | gæster. 'There come guests'

Der oudbrød | oprør. 'There broke out revolt'

Der ofindes | hekse. 'There exist witches'

The textual function of this thetic construction seems to be the active counterpart of the periphrastic passive, cf. 2.2.2. above, i.e. it expresses a subjective modality:

Der kommer en mand ud af huset. 'There comes a man out from the house'

The categoric, subject + predicate, clause, when used under circumstances where the presentational construction could have been chosen, thus expresses the objective modality, i.e. it is the mode of fiction:

En mand kommer ud af huset. 'A man comes out from the house'

#### 3.1.6. Voice

Voice is the alternation between different grammatical realisations of the underlying semantic roles. Whereas the neutral, active, has the default coupling of the Agent role and the GR subject, the other voices, passive and middle, change this relation.

#### Passive

The defining feature and functional content of the Danish passive seems to be the demotion of the Agent whereby the thus vacated subject relation is taken over by either the direct or the indirect object. The demoted Agent can be reintroduced as an adverbial complement, but the object relation as such disappears, the object noun becoming a chômeur (Ô), and the resulting clause is intransitive:

Active:	Agent ↓	Predicate ↓	Patient   ↓	Recipient   ↓
	S	V	O	IO
Passive:	Agent ↓	Predicate ↓	Patient   ↓	Recipient ↓
	Ø/Adv	$V_{pass}$	S/Ô	S/IO

In simple transitive clauses, the object takes over the vacated subject relation, and the verb is passivised, either morphologically (the ending -s) or in a grammaticalised predicative construction with *blive* 'become' or *være* 'be' (see 2.2.2. above):

Man lukker porten. 'One closes the gate'

Porten lukke-s. 'The gate is closed'

Porten bliver lukket. 'The gate is being closed' Porten er lukket. 'The gate is/has been closed'

In ditransitive clauses there are two candidates for the subject relation. Overall, it seems that the indirect object is the first choice whereby the object of the active clause is realised as an object chômeur:

De tilbød Peter en ny cykel. 'They offered Peter a new bicycle'
Peter blev tilbudt en ny cykel. 'Peter was offered a new bicycle'

But also the object, the underlying Patient, is a viable choice:

De fortalte dem sandheden uden omsvøb. 'They told them the truth straight out' Sandheden blev fortalt dem uden omsvøb. 'The truth was told them straight out'

If the Agent is introduced - for textual reasons - it is in the shape of a prepositional phrase with af 'by':

Hun blev fundet af en forbipasserende. 'She was found by a passer-by'

The main reason for using the passive is however that one cannot or doesn't want to mention the Agent.

#### Middle

As mentioned in 2.2.2. it seems reasonable to distinguish a middle, signalled by the simple reflexive pronoun *sig*, from a reflexive proper, signalled by the elaborated pronoun *sig selv* 'Refl-self' (cf. Hvilshøj 1999). What characterises the middle is the non-distinctness of Agent and Patient, and the middle clause is thus like the passive clause an intransitive structure: one way of suppressing the object relation is of course to make it (or, rather, its bearer) non-distinct from the subject. So the transitive parallel to the active clause:

Figaro barberer greven. 'Figaro shaves the count'

is the reflexive clause, where the subject entity is so to speak split up into two:

Greven barberer sig selv. 'The count shaves himself'

and not the middle clause, which is an intransitive structure, the pronoun sig signalling the unavailability of the object relation, absorbed as it were by the subject:

Syntax 95

Greven barberer sig. 'The count shaves'

Syntactically the two constructions are quite different insofar as the middle has wide scope over the whole finite clause, i.e. it includes an infinitive clause, whereas the reflexive has narrow scope and, as the transitive construction which it is, it is limited to the local predication of which it is part:

```
Hun, bad ham, om [at __, hjælpe sig,]. 'She asked him to help her'
Hun, bad ham, om [at __, hjælpe sig selv,]. 'She asked him to help himself'
```

The intransitive nature of the middle is also clearly shown by the fact that middle verbs alternate with transitive structures, but then in the antipassive (prepositional) construction, cf. 3.1.4. above and Durst-Andersen and Herslund (1996:82):

Peter forstår ikke kvinder. 'Peter doesn't understand women' Peter forstår sig ikke på kvinder. 'Peter has no personal understanding of women'

# 3.2. The Simple Sentence

Like the other Germanic languages except English, Danish is a V2 language, i.e. the verb occupies the second position in independent clauses. Put differently, only one constituent may precede the finite verb. This fact has been captured by Danish grammarians not with sets of rules particular to the position of the verb as in most generative approaches (cf. Platzack 1986), but by an overall topological description of the clause.

### 3.2.1. Constituent Order: Topology of the Clause

The Danish sentence can be described at the topological level by a schema which goes back to Diderichsen (1946), but which has been repeatedly revised and refined by several Danish linguists, i.a. Heltoft (1986, 1992), and especially Hansen and Heltoft (Forthc.). The fundamental insight behind these endeavours is that the Danish clause is extraordinarily tightly organised, with a level of hierarchical and topological structuring which in other languages, with the possible exceptions of German and the other Scandinavian languages, is only found at phrase level. In fact, the Danish clause is a phrase in the sense of being heavily coded and tightly organised, and as seen in 2.1.5. above, there are striking resemblances between the clause and the noun phrase. It is obvious that this tight organisation of the clause is also related to the fact that morphological marking only has a reduced and indirect relation to syntax.

The basic division at the topological level is a threefold division of the clause into a Fundament Field, a Nexus Field and a Content Field, each of them being subdivided into slots. The Fundament Field contains all kinds of fronted material (X). The Nexus Field contains first the finite verb (v - Danish is, as said, a V2 language), the subject (n) and certain

adverbials, notably the negation (a). The Content Field is essentially a replica of the Nexus Field insofar as it contains the same kinds of constituents: the lexical but non finite verb (V), the object(s) (N), two adverbial positions (A1 and A2), and a possible Co-Predicate position between these two (Co-P). Some of these slots can be further elaborated and subdivided.

The three major parts of the field schema can be seen as the incarnation of three different functional tasks: the Fundament Field has a pragmatic-textual function, the Nexus Field a syntactic function, and the Content Field a lexical-semantic function. In certain respects the three fields thus seem to be related to and to reflect the tripartition of the sentence into a **neustic**, a **tropic** and a **phrastic** component proposed by Hare (1971). The respective contents of the three "superfields" are the following:

#### Fundament Field

```
Theme (Topic) - Illocution (Neustic) X
```

This is the position where all fronted material is placed, in simple declarative sentences the subject (= the topic) is placed here. Fronted material is not to be confused with dislocated constituents which are even further to the left, outside the sentence schema so to speak. The fundament field is the position of the theme (in Halliday's sense), i.e. the starting point of the message of the clause and constitutes therefore also a kind of illocutionary frame: the neustic component. Although it often is, the theme need not at the same time be the topic or an anaphoric constituent.

The nexus field is the part of the sentence where the material of the finite nexus, i.e. the subject and the finite verb is located, the proposition constituting constituents - unless the subject has been placed in the fundament field. This part of the sentence is thus, together with the fundament field, where the illocutionary value is located - declarative when the subject (n) is in the fundament field (preceding the verb), interrogative when following the finite verb (v): the tropic component. Also the modal aspects of the sentence (modal verbs and adverbs) are located here:

#### Nexus Field

Subject - Illocution (Tropic)
$$v \qquad n \qquad a$$

The lexical content of the sentence is placed in the content field, the phrastic component: lexical verbs (V, as opposed to auxiliaries and modals, (v), objects (N) and different adverbials (A1, A2) as well as predicative complements, co-predicates (Co-P) such as the particle following certain verbs (sende - ud 'send out'), the object complement (male - rød 'paint red') or incorporated nouns (købe - hus 'buy house'):

Syntax

#### Content Field

Lexical Content - Semantic Roles (Phrastic)

V N A1 Co-P A2

As can be seen, there is a significant resemblance between the nexus and the content field insofar as the content field repeats and develops, in more lexically elaborated fashion, the positions already present in the nexus field.

These three superfields then develop in different fashions each other insofar as the overall topological organisation of the sentence can be seen as a gradual and progressive functional and lexical elaboration of the rather "holophrastic" fundament field where almost any material can be placed regardless of functional content or lexical make-up<sup>41</sup>:

Fundament Field	Nexus Field			Conten	Content Field					
X	$\nu$	n	а	V	N	AI	Co-P	A2		
1. Stolen	skal	du	ikke	købe	5		5	+		
2. <b>Du</b>	skal	200	ikke	købe	stolen	1	-			
3	Skal	du	ikke	købe	stolen	=	2	- ?		
4. Købe stolen	skal	du	ikke	5	17	-	*	-		

1. 'The chair you shall not buy', 2. 'You shall not buy the chair', 3. 'Shall you not buy the chair?', 4. 'Buy the chair you shall not'.

A full-fledged example of the sentence schema could be the following:

<b>Fundament Field</b>	Nexus	Nexus Field			Content Field				
X	ν	n	a	V	N	AI	Co-P	A2	
Om søndagen	fik	han	så	sendt	brevet	billigt	ud	med luftpost	
On Sunday	got	he	then	sent	the	cheaply	out	by air mail	
					letter				

<sup>&#</sup>x27;On the Sunday he finally managed to send the letter cheaply by air mail'

Such "maximal fillings" of the entire schema verify the existence of at least all these positions relative to each other.

In simple declarative sentences the subject, or a time or place adverbial, occupies the fundament field, the finite verb the nexus field alone, and an object or adverb is alone in the content field, but in principle all positions can be filled, as in the example above. Here are some further examples of relatively simple sentences:

<sup>41</sup> Excluded from the fundament field are certain types of sentence adverbials such as speaker and hearer oriented particles, cf. 3.4.3. below.

Funda	ment Field	Nexus I	Field		Conten	t Field			
	X	ν	n	a	V	N	AI	Co-P	A2
1.	Han	sover	1733	77.1	3	<u> 2</u>	120	-	123
	Nu	sover	han	snart	2	12	*	(4)	-
2.	Han	malede	2	-	*	huset	15	-	200
	lgår	malede	han	*	-	huset	7	-	-
	lgår	malede	han	T5"	9	huset	2	rødt	(4)
3.	Han	har	2	20	malet	huset	-	0.61	-
	Han	har	140	igen	malet	huset	-	rødt	100
	Nu	har	han	igen	malet	huset	12	rødt	520
4.	Nu	vil	han	igen	male	huset	4	rødt	-

- 1. 'He is sleeping', 'Now he will soon be sleeping'.
- 2. 'He painted the house', 'Yesterday he painted the house', 'Yesterday he painted the house red'.
- 3. 'He has painted the house', 'He has again painted the house red', 'Now he has again painted the house red'.
- 4. 'Now he will again paint the house red'.

The a field, the position of the negation, is also where other negative constituents such as negative pronouns, cf. 2.1.2.5. above, are placed. The use of the synthetic negative pronoun thus gives another ordering than the use of a negation and a positive *noget* 'something':

Han havde ingenting hørt. 'He had heard nothing'
Han havde ikke hørt noget. 'He had not heard anything'

The often subtle working of the topological arrangement is further illustrated by alternative constituent orders in causative constructions. One productive causative construction is the combination of the verb fa 'get' and the past participle, cf. 2.2.2. above. In this construction, the nominal object has two positional possibilities:

- a. Han får bilen repareret. 'He has his car repaired'
- b. Han får repareret bilen. 'He has repaired his car'

The apparently alternative placements of the object noun bilen 'the car' either before or after the participle reveal the two possible analyses of the construction: In a. the participle has the status of a Co-Predicate, i.e. få repareret is a complex predicate, while in b. the participle is the lexical main verb with få as a causative auxiliary. The two constructions correspond to two different fillings of the sentence schema:

<b>Fundament Field</b>	Nexu	s Field		Conte	ent Field			
X	$\boldsymbol{v}$	n	а	V	N	AI	Co-P	A2
Han	får	-	1361	840	bilen	-	repareret	17
Han	får	5	86	repare	eret bilen	920	200	S

But as seen, the nominal object bilen 'the car' in fact occupies the same position in both.

Syntax 99

#### Elaboration of the slots

Certain positions can be further elaborated, viz. the N position of the content field which contains both the direct and the indirect object. This gives the following contrast between indirect and prepositional object ("dative shift"):

<b>Fundament Field</b>	Nexus	Field		Conte	ent Field			
X	ν	n	a	V	N	Al	Co-P	A2
					10	0		
Den dag	sendte	Helle	-	(4)	ham	en bamse -	5	9
Den dag	sendte	Helle	-	·	3 <del>8</del> 3	en bamse -	-	til ham
'That day Helle ser	nt him a to	eddybear/a	teddybe	ear to him'				

Another example of the further elaboration of a slot is the case where a non-finite clause with the infinitive has the object relation, i.e. fills the N slot, or the adject relation, i.e. fills the A2 slot governed by a preposition. Such infinitive clauses have the complementiser at 'to', no fundament field and their own reduced version of the nexus field - there is no n - but an identical content field. These fields can be unfolded like the windows on a computer screen:

X	v	n	a	V	Ν		AI	Co-P	A2
					10	0			
Hans	lovede	170	176	588	hende	Inf	2	-	15
						l	colors a series		
		а	Compl	٧	V	N	Al	Co-P	A2
		200	at	ville	give	cyklen	-	væk	<b>.</b>
		ikke	at	-	give	cyklen	-	-	til Ole
						1			
					IO		O		
					Ole		cyklen		
		ikke	at	4	komme	-	for sent	hjem	-

'(Hans promised her) to be going to give the bicycle away', '... not to give the bicycle to Ole', '... not to give Ole the bicycle', '... not to come home too late'.

As can be seen, the infinitive clause can have the same constituents as the finite clause minus the subject position (n) and the fundament field. Notice also that the negation (a) precedes the complementiser at 'to'. This is for instance different from Swedish, which has a negation position after the complementiser. In surface structure then, a clause with a negation and an infinitive clause can be ambiguous whereas Swedish must disambiguate positionally (... inte att ... vs. ...att inte ...):

Peter valgte ikke [at starte]. 'Peter did not choose to start'
Peter valgte [ikke at starte]. 'Peter chose not to start'

The difference between the two structures is once more resolved by a more complete filling of the different slots, e.g. by the introduction of an auxiliary (v):

```
Peter har ikke valgt [at starte]. 'Peter has not chosen to start'
Peter har valgt [ikke at starte]. 'Peter has chosen not to start'
```

# Preposition stranding

As stated in the overall presentation of the three superfields, the fundament field is where anything can be placed. And this "anything" includes objects of prepositions. Such constituents can be extracted from the prepositional phrase, be placed in the fundament field and thus leave the preposition behind, stranded (cf. Herslund 1984). The fundament field thus contains the lexical material unmarked for syntactic function, while the preposition, the indicator of syntactic function, stays in the field reserved for the relevant function. This is the normal solution in spoken and written language; the alternative solution, fronting the entire prepositional phrase is only found in more solemn registers:

- a. Jeg stoler ikke på Peter. 'I don't rely on Peter'
- b. Peter stoler jeg ikke på \_\_. 'Peter I don't rely on'
- c. På Peter stoler jeg ikke. 'On Peter I don't rely'

All kinds of prepositional structures, valence bound complements as well as adverbial adjuncts, can thus be split into two. And since interrogative pronouns are designated members of the fundament field, preposition stranding is especially common with them:

```
Den pakke har jeg ventet på ___. 'That parcel I have been waiting for'

Hvem har du været i Tivoli med __? 'Who have you been to Tivoli with?'
```

#### Light constituents

Certain so-called light constituents i.e. some adverbs and pronouns can be placed in the nexus field as clitics on the finite verb. Contrary to nominal objects and other adverbs they thus precede the negation (cf. Togeby 2001):

<b>Fundament Field</b>	Nexus 1	Field			Conte	ent Field			
X	ν	n	Clitic	a	V	N	Al	Co-P	A2
Jeg	kender	5	s <del>.*</del> .	ikke	(+)	Hans	320	320	1
Jeg	kender	-	-ham	ikke	-	B#58	-	æ:	9
Jeg	ser	#	2	ikke	227	Hans	i dag		90
Jeg	ser	-	-nu	ikke	845	Hans		25	-
-	Kender	-	-du	ikke	800	Hans	· · ·		- ?
2	Kender	2	-du-ham	ikke	-75	1001		*	- ?

<sup>&#</sup>x27;I don't know Hans', 'I don't know him'. 'I don't see Hans today', 'I really don't see him'. 'Don't you know

Syntax 101

Hans?', 'Don't you know him?'.

Since pronouns and adverbs in this position are liable to phonetic reduction:

```
Jeg kender ham ikke. [j∂ kɛn∧m eg∂ ] 'I don't know him' 
Jeg ved det ikke. [j∂ ve:ð∂ eg∂] 'I don't know it'
```

such light constituents seem to constitute classic cases of cliticisation.

# 3.2.2. Topology of Subordinate Clauses

Subordinate clauses are finite dependent structures with no illocutionary value of their own (see 3.3. below). In most cases they just convey the illocutionary value of a matrix verb. They consequently have no fundament field and therefore not the variation in word order which signals the declarative - interrogative distinction. In return they have a position reserved for complementisers (at 'that', om 'whether, if', hvis 'if', når 'when', som 'as', etc.), interrogative pronouns (hvem 'who', hvornår 'when', hvorfor 'why', etc.). This position can however, in completive and relative clauses, be empty. Another consequence of the lacking fundament field is that the subject precedes the negation and the finite verb:

Comple	ementiser	Nexus	Field		Content	Field			
	Compl	n	a	ν	V	N	AI	Co-P	A2
	hvis	Helle	ikke	havde	sendt	brevet	billigt	afsted	med luftpost
	at	Helle	.7	har	givet	1	-	-	til jul
					10		0		POR LOW BEAUTY
					drengen		bamsen		
	Ø	Hans	ikke	er	gået	-	=	i seng	endnu

<sup>&#</sup>x27;... if Helle had not sent the letter cheaply away by air mail', '... that Helle has given the boy the teddybear for Christmas', '... Ø Hans has not gone to bed yet'.

The crucial difference between independent and subordinate clauses is thus the position of the negation which in independent clauses follows, in subordinate precedes the finite verb:

```
Jeg kender ikke Petersen. 'I don't know Petersen'
Du ved (at) jeg ikke kender Petersen. 'You know (that) I don't know Petersen'
```

But the fundamental difference between independent and subordinate clauses can in certain cases be overruled by the use of the independent clause topological pattern - i.e. the pattern with a fundament field and the negation following the finite verb - in a subordinate clause:

Du ved at Petersen kender jeg ikke. 'You know that Petersen I don't know' Du ved at jeg kender ikke Petersen. 'You know that I don't know Petersen'

Jeg tror at du er ikke rigtig klog. 'I think that you are out of your mind'

This is however only possible with matrix verbs such as *vide* 'know', *tro* 'believe', *sige* 'say', *påstå* 'claim', etc. whose main function is to introduce the content of the subordinate clause and to carry the illocutionary value of assertion. They have in fact very little informative value of their own and they can easily be replaced by illocutionary adverbs in an independent clause structure (see 3.4.3. below):

Petersen kender jeg jo ikke. 'Petersen I don't know - as you know' Du er vist ikke rigtig klog. 'You are out of your mind - I believe'

So the fact that the matrix verb is only an "assertion carrier" is reflected by the use of the declarative pattern in the subordinate clause. This analysis is corroborated by the fact that the use of independent clause word order is excluded in subordinate clauses whose content is presupposed, and therfore not asserted:

\*Jeg beklager at Petersen kender du ikke. 'I regret that Petersen you don't know'
\*Jeg er ked af at du kender ikke Petersen. 'I am sorry that you know not Petersen'

Facts such as these give rise to a reconsideration of the two patterns, the independent and the subordinate clause pattern, cf. Hansen and Heltoft (Forthc.: Ch. 15). It is not really a question of independent or subordinate clause pattern, but rather a difference between a declarative - assertive pattern - found, as seen in both independent and subordinate clauses - and a governed, non-assertive pattern - found in subordinate clauses where it is governed by the complementiser, but also in independent clauses introduced by non-assertive particles such as gid 'if only' and mon 'I wonder':

Gid du ikke var gået derhen! 'If only you had not gone there'

Mon han ikke snart har fundet den? 'I wonder if he hasn't found it yet'

#### Clause intertwining

One of the most striking features of Danish clause combining is the so-called intertwined clauses where a constituent of a subordinate clause occurs in the fundament field of the matrix clause (cf. Jakobsen 1996, Jensen 2001):

Stolen ved jeg ikke hvor vi skal stille \_\_\_.

'The chair I don't know where we shall place'

Hvem tror du du kan lege kispus med \_\_\_?

'Who do you think you can play tricks on?'

Det synes jeg ikke du skal blande dig i \_\_\_.

Syntax

103

'That I don't think you shall meddle in'

As seen in the last example this construction interacts with prepositions stranding, with which it of course shares some features. There is certainly some typological correlation here. In both cases a constituent bearing a GR in a subordinate clause is fronted and occurs in the fundament field in independent clauses, in the complementiser field in subordinate clauses:

Jeg har fundet den bog som du troede du havde glemt \_\_\_ på kontoret.
'I have found the book you thought you had forgotten in the office'

## Summing up

The overall picture of the Danish clause structure is one of a tight-knit, phrase-like topological organisation with slots pre-reserved for the different GRs and adjuncts. In comparison with other languages, where word order is freer and therefore available for different pragmatic and textual purposes, the topology of the Danish clause is a highly and thoroughly grammaticalised system, where the only latitude for free pragmatically and textually dictated choices is the fundament field.

This system is found in two versions: the assertive pattern and the governed, non-assertive pattern. This leaves, together with the independent - subordinate clause distinction, four possible topological arrangements:

	Independent Clause	Subordinate Clause
Assertive	Petersen kender jeg ikke.	Hun siger at Petersen kender hun ikke.
	'Petersen I don't know'	'She says that Petersen she doesn't know'
Non-assertive	Gid han aldrig var født!	Jeg ønsker at han aldrig var født.
	'If only he never was born!'	'I wish he never was born'

### 3.3. Complex Sentences

Complex sentences are created by the joining together of sentential structures. This junction is, as in most other languages, of two kinds: coordination and subordination. Within the first kind of junction one can further distinguish a special kind of complex sentence, cosubordination, and within subordination one can distinguish finite and non-finite subordinate clauses.

#### 3.3.1. Coordination

Like other constituents at the same level with identical functions independent clauses can be coordinated, i.e. joined together into a more complex unit, by means of a small set of coordinative conjunctions: og 'and', eller 'or', men 'but', for and obsolete thi 'for'. These conjunctions coordinate all kinds of constituents with the exception of for, thi which only join independent clauses together. The complex sentence created by coordination is one in which the constituents preserve their autonomy, and as sentential structures their illocutionary value,

but the same in both conjoints. The second of two coordinated clauses may have its subject deleted under identity with the subject of the first clause. These are the major differences between coordination and subordination:

Borgmesteren var til stede, og han holdt en tale.

'The mayor was present and he made a speech'

Borgmesteren var til stede, men \_\_ holdt ingen tale.

'The mayor was present but made no speech'

Kommer du i aften, eller har du andet for?

'Do you come tonight or do you have other plans?'

The difference between coordination and subordination with respect to illocutionary value can be illustrated by the coordinative for 'for' opposed to subordinative fordi 'because':

Borgmesteren kom ikke, for han var ikke i byen.
'The mayor didn't come, for he was not in town'
Borgmesteren kom ikke fordi han ikke var i byen.
'The mayor didn't come because he was not in town'

In the first example, there are two independent assertions combined into a causal relationship. In the second, there is one assertion whose content is explained by the subordinate clause. The special status of the subordinate clause is revealed by the fact that it can be within the scope of a negation and therefore allows two readings: when inside the scope of the negation of the main clause, the meaning is 'that the reason for the mayor's coming was not his absence from the town', but when it is outside, the sentence is synonymous with the coordination construction, which has only one reading. The autonomous assertion of the *for*-clause can never be within the scope of a preceding negation.

As mentioned in 2.2.3. above, Danish has an extended use of serial verbs in a kind of cosubordination structure. The grammaticalisation of such coordinative structures seems to be very much in tune with an evolutionary trend in the language whereby coordinative structures increasingly supplant subordinate constructions. This is especially widespread in constructions with the imperative, where the colloquial language substitutes coordinated imperatives for the traditional imperative + infinitive constructions. This shift is of course facilitated by the homonymy of the coordinator og and the infinitive marker at, both pronounced [ $\land$ ]:

Begynd at løbe nu! 'Start running now!'
Begynd og løb nu! 'Start and run now!'

Prov at dreje den til højre! 'Try to turn it to the right!'

Syntax

Prøv og drej den til højre! 'Try and turn it to the right!'

In the preterite, where there is no imperative the infinitive construction thus competes with a coordinated preterite:

Hvis du prøvede at dreje den til højre... 'If you tied to turn it to the right ...'
Hvis du prøvede og drejede den til højre ... 'If you tried and turned it to the right ...'

105

#### 3.3.2. Subordination

Following Diderichsen (1946) and Hansen (1998) subordinate clauses can be classified into three types: explicative clauses, implicative clauses and operator clauses (which Diderichsen and Hansen call 'neutral'). One must further distinguish non-finite clauses.

#### **Explicative clauses**

Explicative clauses are such which fill a valence position of the main clause and thus "explicate" the valence potential of the main verb. Such clauses are typically subject, object, prepositional object (adject) or subject complement of the main clause. They are introduced by the complementiser at 'that', which can be omitted, however, in plain object clauses:

[At hun skulle købe det hus]<sub>s</sub> undrer mig ikke.

'That she would buy that house doesn't astonish me'

Vi mente [\_\_ det var bedst sådan]<sub>o</sub>.

'We thought it was best that way'

Hun overbeviste mig om [at det var sket sådan]<sub>A</sub>.

'She convinced me that it had so happened'

Such explicative clauses are completive clauses. But valence positions of the main clause can also be explicated by interrogative clauses introduced by *om* 'if, whether' or an interrogative pronoun:

Jeg ved ikke [om jeg gider]<sub>0</sub>.
'I don't know if a feel like it'
Forstår du ikke nu [hvem der har gjort det]<sub>0</sub>?<sup>42</sup>

```
Comp n a v V N ...

1. Hun spurgte hvem der - var kommet -
*Hun spurgte hvem - - var kommet -

2. Hun spurgte hvem han - havde mødt -
```

<sup>&</sup>lt;sup>42</sup> The appearance of the formal subject *der* 'there' in subordinate clauses with an interrogative pronoun as subject is readily understandable under the assumption of 3.2.2. that the interrogative pronoun occupies the complementiser position, and as Danish finite clauses cannot be subjectless, the formal *der* is then introduced:

'Don't you understand now who has done it?'

Hun er i tvivl om [hvad hun skal mene]<sub>A</sub>.

'She doesn't really know what to mean'

Also adjectives and nouns can be explicated, with prepositional objects (adjects):

Jeg er ked af [at du tager det sådan]<sub>A</sub>.

'I am sorry that you react in that way'

Han har en forestilling om [at jorden er trekantet]<sub>A</sub>.

'He has a conception that the earth is triangular'

The last kind of explicative clause is not strictly speaking explicating a valence position but a quantifier. This type is the consecutive clause as in:

Han er så tyk at man er bange for sine møbler.

'He is so obese that one fears for one's furniture'

where the subordinate clause explicates the quantifier/degree adverb så 'so'.

#### Implicative clauses

Implicative clauses contain a constituent which is implied by some constituent of the main clause, i.e. the two clauses in a sense share a common constituent which may be expressed in both clauses, but need not. The typical instance of this structure is of course the relative clause where the antecedent and the relative element is the shared constituent.

Relative clauses, which almost invariably follow their antecedent immediately, are introduced by the complementiser som 'as', by zero,  $\emptyset$ , or by an interrogative pronoun (mainly following a preposition). This gives the following possibilities according to the function of the relativised position (subject, object, prepositional object (adject)) and the possibility of preposition stranding:

Antecedent	Compl	n	a	ν	V	N	AI	Co-P	A2
Den pige	som	1	-	gik	-	3	-	ud	2
Den pige	Ø	der	2.	gik	-	2 1	74	ud	140
'The girl who v	went outside'								
Den pige	som	vi	<b>5</b> 1	kender	u	발	1724	721	728

<sup>3.</sup> Hun spurgte hvad der - var sket -

Den pige	12	vi	=	CARL CARREST	-	-	2	120
'The girl (whom)								

107

Den pige	som	han	ikke	regner	2	2	2	-	mea
Den pige	-	han	ikke	regner	-	-	4	858	mea
Den kvinde	med hv	em han		har		voksne	875	(40)	(#Z)
						børn			

<sup>&#</sup>x27;The girl (who) he doesn't reckon with ...'. 'The woman with whom he has adult children ...'

When the relativised position is the subject, this relation is either filled by the complementiser som or by the dummy der 'there', which is the general subject substitute in Danish, cf. the interrogative clauses above (note 42) and presentational sentences like:

Der foregår mærkelige ting på slottet. 'Strange things occur in the castle'

The colloquial language may even fill the empty subject position after som with the, otherwise, regular der, and the complementiser position with a redundant at:

Den pige som (at) der gik ud for lidt siden er Jensens søster.
'The girl who went outside a while ago is Jensen's sister'

The second type of implicative constructions are the so-called free relatives, i.e. structures introduced by interrogative pronouns which act as a shared clause member. In the following example the pronoun *hvem* 'who' is the indirect object of the subordinate verb. At the same time, the *hvem*-clause as a whole is the indirect object of the main verb:

Hvem gud giver embede, giver han vel også forstand.

'Whom God gives an office he certainly also gives insight'

Such clauses thus have no antecedent and resemble interrogative explicative clauses, but they differ from them insofar as the pronoun - or the pronoun + the subordinate clause - has grammatical relations to two verbs, the subordinate and the main verb.

#### Operator clauses

Syntax

The operator clauses are the adverbial clauses of traditional grammar, i.e. clauses expressing time, cause, purpose, concession and condition<sup>43</sup>. Where in the two previous cases one can speak of embedding insofar as the explicative clause fills a valence position in the main clause and the implicative clause is constructed with a shared clause member, the operator clauses are not really embedded. The hypotactical relation between the two clauses is rather brought

<sup>4.</sup> Hun spurgte hvad han så havde købt -

<sup>1.&#</sup>x27;She asked who had come'. 2. 'She asked who he had met'. 3. 'She asked what had happened'. 4.'She asked what he had bought then'. Cf. the analysis of relative clauses below.

<sup>&</sup>lt;sup>43</sup> Notice that in the present framework the adverbial consecutive clause is interpreted as an explicative clause.

about by the joining together of the two by an operator, i.e. the adverbial, often complex, subordinating conjunction:

Hun var allerede taget afsted da vi ankom.

'She had already left when we arrived'

Taget blæste af før (end) vi anede det.

'The roof blew off before we knew of it'

Bogen var blevet udsolgt fordi der var mange studenter.

'The book had been sold out because there were many students'

Hun låste døren for at børnene ikke skulle løbe ud.

'She locked the door in order that the children shouldn't run outside'

Vi tager en paraply med selv om det ikke regner.

'We bring an umbrella even if it doesn't rain'

Vi tager en paraply med hvis det begynder at regne.

'We bring an umbrella if it begins to rain'

In such cases, one can say that the operator constructs a complex content with the content of the individual clauses. The subordinate clause then sets out a frame of a temporal, causal, conditional, etc. nature which states the conditions under which the content of the main clause can be said to be or to become true, or the assertion of the main + subordinate clause to be valid:

Morderen har haft sin egen nøgle eftersom døren var låst udefra.

'The murderer has had his own key since the door was locked from the outside'

In such cases, the subordinate clause does not state a cause of the state of affairs reported by the main clause - it is obvious that the fact that the door was locked couldn't cause the murderer to have his own key - but it motivates the assertion of it: the locked door authorises the conclusion which is asserted by the main clause.

#### Non-finite clauses

The most important kind of non-finite hypotaxis relevant to the syntax of Danish is the infinitival clause. This non-finite construction is in all respects similar to the finite subordinate clauses except for the lack of its own subject. An infinitival clause must always seek its subject outside its own limits, and the principal candidate is always the subject of the main verb, whether the infinitival clause is explicative, implicative or an operator construction:

### **Explicative:**

Hun forsøgte [at \_\_ nå toget]<sub>0</sub>. 'She tried to catch the train' Hun tænker på [at \_\_ holde op]<sub>A</sub>. 'She considers to stop'

Syntax 109

#### Implicative:

Han har ikke nogen [at \_\_ lege med]. 'He has no-one to play with'

# Operator:

Hun satte sig ned [for at \_\_ tænke]. 'She sat down in order to think'
Han gik rundt [uden at \_\_ se sig for]. 'He walked around without looking'

But as seen in 2.2.1.2. above, also the object or the indirect object can control an infinitive in an explicative or an implicative construction:

Hun tvang ham; til [at \_\_; samle bogen op]. 'She forced him to pick up the book' Hun forbød ham; [at \_\_; samle bogen op]. 'She forbade him to pick up the book'

Hun gav ham, ikke noget [at \_\_, vælge imellem]. 'She didn't give him anything to choose from'

#### 3.4. Discourse Phenomena

Discourse phenomena, the textual component of language use, are devices which establish cohesion in longer stretches of speech than the sentence. Since cohesion is largely a matter of repetition, the phenomena to be treated are those which, without being of a grammatical-structural nature like the relations within the sentence, assure and articulate relations between individual sentences. These phenomena can be treated under the headings anaphora, connection and discourse particles.

#### 3.4.1. Anaphora

As in other languages, nominal anaphors in Danish are either lexical, pronominal or elliptic expressions which, in order to be properly interpreted, require the information provided by another nominal expression, i.e. the antecedent.

Apart from the identical repetition of the same lexical material, lexical anaphors are of mainly two types. The first is the use of a synonymous expression, which by a definite expression, i.e. a noun phrase with a definite, a demonstrative or a possessive/genitival determiner, picks out the same referent as the antecedent, but does so by highlighting some particular aspect of this referent:

Peter den Store ...

Den store reformator ...

Denne blodige tyran ...

Ruslands første moderne zar ...

'Peter the Great ... The great reformer .../This bloody tyrant .../ Russia's first modern Czar ...'

The second lexical type is the associative anaphor where some entity forming part of or being organically linked to the referent of the antecedent is picked out and stated in the definite form:

Vi ankom til en lille landsby. Kroen var lukket.
'We arrived at a little village. The inn was closed'

As in most other languages only the definite (possibly possessive or genitival) determiner can be used here, not the demonstrative, which always resumes the antecedent in its totality.

Pronominal anaphors can be either demonstrative or personal pronouns. The choice between the two, and between pronominal and lexical anaphors, seems to rely on the textual distance between antecedent and anaphor as realised as a difference between belonging to the same or to different text sequences. Within the same text sequence, a personal pronoun most often suffices to establish an anaphoric relation:

Soldaterne havde marcheret hele dagen. Underligt nok var de ikke sultne.
'The soldiers had been marching all day. Strangely enough they were not hungry'

noticeably between main and subordinate clause:

Soldaterne sagde at de ikke var sultne.
'The soldiers said that they were not hungry'

Between text sequences, most clearly perhaps at the start of a new paragraph, a heavier anaphor, i.e. a demonstrative or a lexical anaphor seems to be required.

Elliptic anaphors only occur in grammaticalised constructions: Danish is not a prodrop language. The contexts where no pronouns occur are coordination constructions, whether serial verb constructions or free coordinations:

```
Hun sidder og __ synger. 'She is (sitting) singing'
Han kommer og __ ser på telefonen. 'He is coming to inspect the phone'
```

Han løb hen til huset og \_\_ åbnede døren. 'He ran to the house and opened the door'

Relative clauses constitute the other major, and only subordinative type of pronominal ellipsis permitting contexts, as seen in 3.3.2. above. When it is the subject of the relative clause which is elided, formal *der* 'there' is inserted:

```
Vi så på et hus __ der lå midt i byen.
'We considered buying a house placed in the centre of the town'
```

Syntax 111

Vi købte et hus \_\_ vi aldrig havde set.
'We bought a house we had never seen'

The subject of infinitival constructions is treated in the relevant sections, 2.2.1.2. and 3.3.2. As with the coordinative subject ellipsis the antecedent of the infinitival subject most often is the subject of the main verb, especially with adverbial infinitive clauses:

Han, havde lagt den til hende på køleskabet for ikke at \_\_, glemme den. 'He had put it on top of the fridge for her in order not to forget it'

# 3.4.2. Theme - Rheme, Topic - Focus

As the topological structure (word order), as seen, is thoroughly grammaticalised, most slots being reserved for constituents bearing particular grammatical relations, there is very little room for the exploitation of word order for logical and pragmatic purposes. There are, however, three features of the Danish clause structure which allow a certain amount of flexibility. The first of these is of course the fundament field, which as seen in 3.2. can host any constituent, thereby thematising it. Following Halliday (1985), we here take the stand, that the theme is the first constituent of the sentence, the point of departure for the message, whether containing given or new information. And it seems indeed that this function has been grammaticalised in the topology of the Danish sentence, which is clearly bisected into a theme (= the constituent of the fundament field) and a rhematic part. As said before, the theme is not necessarily the topic, though it often is.

The most usual fillings of the fundament field, i.e. the theme, are situative adverbials of time and place, which clearly do not constitute the topic:

Den dag kunne han ikke åbne døren. 'That day he couldn't open the door'

or of course the subject, whether anaphorical (= topic) or new:

Maleren kunne ikke komme ind i huset. 'The painter couldn't get into the house' En maler skal ikke ind her. 'A painter shall not enter here'

But as said, any constituent can thus be fronted, i.e. valence constituents, argumentative connectors, and non finite verbs (accompanied by their valence constituents):

Huset ville han ikke sælge. 'The house he wouldn't sell'

Derfor ville han ikke sælge huset. 'Therefore he wouldn't sell the house'

Sælge huset kunne han ikke drømme om. 'Sell the house he wouldn't dream of'

The fronting of constituents other than the situative adverbials and the subject may signal them

as contrastive focus.

Any constituent can be topicalised by being left-dislocated, i.e. moved out of the clause as it were, preceding the fundament field, and resumed in the fundament field by a pronoun:

Dislocation	<b>Fundament</b>	Sentence
Jensen,	ham	læser vi gerne.
'Jensen,	him	we read with pleasure'
Den bil,	den	ville jeg aldrig købe.
'That car	it	I would never buy'

This is especially common for subordinate clauses which, when dislocated, are resumed by either det 'it', subject or object clauses, or by så 'so', temporal and conditional clauses:

Dislocation	<b>Fundament</b>	Sentence
At han er gået,	det	undrer mig ikke.
'That he has go	ne that doesn't	astonish me'
Når du går,	så	husk at låse døren.
'When you leav	e then remembe	er to lock the door'

The focus is the focal point of the message, the part of it which the receiver is especially invited to accept or refute. The normal focus domain is within the rheme part of the sentence. The subject and the sentence final situative adverbials of time and place are normally outside the focus domain, cf. their privileged occurrence in the fundament field as described above. The focus is thus to be found among the verb and its valence constituents:

Han havde glemt **sin pung** derhjemme. Nu vidste han ikke hvordan han skulle betale regningen.

'He had forgotten his purse at home. Now he didn't know how to pay the bill.

More specialised signalling of focus status are the iconic focus, the use of focus operators, and the cleft sentence construction. The iconic focus is the position of the focalised constituent immediately after the negation. Here and only here situative adverbials can be focalised:

Han havde ikke den dag ventet at være uden penge på en dyr restaurant.

'He had not that (particular) day expected to be without money in an expensive restaurant (though it had happened at other occasions)'

Apart from the negation ikke 'not', focus operators are words like kun 'only', allerede 'already', især 'especially', også 'also, too':

Syntax 113

Han havde kun tovende accepteret deres tilbud. Han frygtede for følgerne.
'He had only hesitantly accepted their offer. He was afraid of the consequences'

The cleft sentence introduces what could be called a marked focus (cf. Nølke 1984, Hansen 1995). Whereas the neutral focus is located in the content field of the sentence, any constituent can be focalised in a cleft sentence with *det er* 'it is':

Det er Jensen der skal gøre det. 'It is Jensen who shall do it' Det er i dag de skal komme. 'It is today they are due to come'

This marked focus has the value of an exclusion which picks out the proper member of an implied set to the exclusion of the other, possible and envisageable candidates.

#### 3.4.3. Connectors and Discourse Particles

The use of connectors, i.e. adverbial and other expressions which articulate the logical cohesion between sentences, play a predominant role in Danish. As seen in the preceding section, sentence focus plays an important part in establishing cohesion between sentences. It is this implicit cohesion which is made explicit by the use of special words such as *derfor* 'therefore', *altså* 'accordingly', *nemlig* 'namely', *ellers* 'though', *da* 'then', *dog* 'nevertheless'. Such connectors link the content of their sentence to the focus of the preceding sentence, thereby highlighting a relation of e.g. cause or reason, conclusion or concession which has already been implicitly induced by the very wording of the sentences:

Han havde kun tøvende accepteret deres tilbud. Han frygtede nemlig for følgerne.

'He had only hesitantly accepted their offer. He feared namely the consequences'

Han var bange for følgerne. Han havde derfor kun tøvende accepteret deres tilbud.

'He feared the consequences. He had therefore only hesitantly accepted their offer'

Det var et risikabelt foretagende. Han skulle altså passe på.

'It was a risky enterprise. He accordingly had to be careful'

Han kunne tage det roligt. Det var ellers et risikabelt foretagende.

'He could take it easy. It was a risky enterprise though'

Det var helt risikofrit. Han skulle **alligevel** passe på.

'It was entirely unrisky. He nevertheless should be careful'

A special class of monosyllabic words, all of which (except sgu, see below) also function as connectors or temporal adverbs, fulfill a special function, especially in the interactive use of spoken language, by qualifying the speaker's attitude to the content of his message (cf. Davidsen-Nielsen 1996). This qualification can be a reflection of the speaker's own conception

and attitude, or they can be hearer-oriented, either presupposing, consensus seeking or correcting: nok 'I suppose', vel 'I dare say', vist 'I believe', sgu 'I'll be damned'<sup>44</sup>; jo 'you know', nu 'you see, surely', skam 'I tell you', da 'surely', dog 'really'. These discourse particles precede the negation immediately and are unstressed, when they function this way, whereas they may be stressed when they function as connectors or time adverbs. As they will obligatorily precede the negation in their discourse function, it follows that they cannot be focalised.

The speaker-oriented discourse particles can be evidentials or epistemic adverbs, and as such they reflect the basis for the conclusions the speaker advances:

Peter er nok ikke i Paris. 'Peter - I suppose - is not in Paris'

Peter er vel i Paris. 'Peter is - I dare say/I know of no counterargument - in Paris'

Peter er vist i Paris. 'Peter is - I believe, and others with me - in Paris'

Peter er sgu i Paris. 'Peter is - and I kind of admire his decision - in Paris'

The hearer-oriented particles involve the hearer in different ways:

Peter er da i Paris. 'Peter is - as you should know - in Paris'

Peter er jo i Paris. 'Peter is - as you know - in Paris'

Peter er nu i Paris. 'Peter is - you will not contradict me here - in Paris'

Peter er skam i Paris. 'Peter is - and you're wrong - in Paris'

Whereas *nu*, *skam* assert a fact and correct the hearer's beliefs, the main function of *da*, *jo* is to impose a presupposition: with *da* the speaker assumes that the hearer is aware of the fact but doesn't accept it, with *jo* the speaker assumes that the hearer shares his knowledge.

#### 4. SAMPLE TEXTS

1.

#### Det hvide fort

Vi havde et fort i Afrika. Det ligger dernede endnu, bygget på et lavt klippefremspring, hvor kysten ligesom sætter en fod ud i havet. De hvide, overkalkede mure lyser mellem palmerne. Over indgangsporten staar Christian den Syvendes navnetræk. Hver gang en palmegren i nærheden bevæger sig i vinden, fejer dens fligede skygge frem og tilbage over initialerne som i et forgæves forsøg paa at udviske den gamle indskrift (Thorkild Hansen, Slavernes kyst, 1967, p. 9)<sup>1</sup>

the white-DEF fort

Vi hav-de e-t fort i Afrika. De-t ligg-e-r derned-e endnu, bygg-e-t

We have-pret a-neu fort in Africa. It-neu lie-pres there.down-stat still, build-past-part
paa e-t lav-t klippefremspring, hvor kyst-e-n ligesom sætt-e-r e-n fod ud i

on a-neu low-neu rock.overhang, where coast-DEF like set-pres a-com foot out-DYN in
hav-e-t. De hvid-e, overkalk-e-d-e mur-e lys-e-r mellem palme-r-n-e.

ocean-DEF. The white-pl., whitewashed-pl wall-pl light-pres between palm-pl-DEF.

Over indgangsport-e-n staa-r Christian den Syvende-s navnetræk.

Above entrance.gate-DEF stand-pres Christian the Seventh-GEN monogram.

Hver gang e-n palmegren i nærhed-e-n bevæg-e-r sig i vind-e-n, fej-e-r

Every time a-com palm.branch in proximity-DEF move-pres reference som i e-t

it-COM-GEN laciniate-DEF shadow forward-DYN and backward over initial-PL-DEF as in a-NEU

forgæves forsøg paa at udvisk-e de-n gaml-e indskrift.

vain attempt on to wipe.out-INF the-COM old-DEF inscription.

We had a fort in Africa. It still is down there, built upon a low overhang where it is as if the coast sets a foot out into the sea. Its whitewashed walls shine among the palm trees. Above the gate is the monogram of king Christian the Seventh. Every time a nearby palm branch moves in the wind its laciniate shadow sweeps forwards and backwards over the initials as in a vain attempt at erasing the old inscription.

<sup>&</sup>lt;sup>44</sup> The word *sgu* is originally a swearword, short for *så gud* or *så gud hjælpe mig* 'may God help me', but it seems to have lost most of its swearlike character and to have become an emphatic particle underlining the point of view of the speaker.

In spite of its date of publication, 1967, the author still uses the pre-1948 orthography insofar as he uses 'aa' for 'å' and the old preterite forms of the modal verbs, viz. kunde 'could'.

2.

Også Danmarks historiske erfaring skal skrives om under indtryk af Sovjetunionens undergang og nationalismens genopblussen. Danmark ligger ganske vist stadig hvor det altid har ligget, men vi har behov for en selvbesindelse, der forklarer hvordan Danmark og danskerne har overlevet i en kold og farlig verden, hvor det ikke altid går efter demokratisk fortjeneste. En af grundene til Danmarks succes har været den indre sociale demokratisering. Men fuldt så vigtigt har det været at det lille rige arvede navn, legitimitet - og flag - fra en mellemstor, multinational stat ved indsejlingen til Østersøen (Uffe Østergård, Europa. Identitet og identitetspolitik, 2000, p.15).

Også Danmark-s historisk-e erfaring skal skriv-e-s om under indtryk af also Denmark-GEN historical-DEF experience shall write-INF-PASS again under impression of Sovjetunion-e-n-s undergang og nationalisme-n-s genopblussen. Soviet Union-DEF-GEN fall and nationalism-DEF-GEN recrudescence. Danmark ligg-e-r ganske vist stadig hvor de-t altid ha-r ligg-e-t, Denmark lie-PRES true enough still where it-NEU always have-PRES lie-PAST-PART, men vi ha-r behov for e-n selvbesindelse, der forklar-e-r but we have-PRES need for a-COM self-reflection, there explain-PRES hvordan Danmark og dansk-er-n-e ha-r overlev-e-t i e-n kold how Denmark and Dane-PL-DEF have-PRES survive-PAST-PART in a-COM kold-COM og farlig verden, hvor de-t ikke altid gå-r efter demokratisk fortjeneste. and dangerous-COM world, where it-NEU not always go-PRES after democratic-COM merit. E-n af grund-e-n-e til Danmark-s succes ha-r vær-e-t de-n one-COM of reason-PL-DEF to Denmark-GEN success have-PRES be-PAST-PART the-COM indre social-e demokratisering. Men fuld-t så vigtig-t ha-r de-t internal-DEF social-DEF democratisation. But full-ADV so important-NEU have-PRES it-NEU vær-e-t at de-t lille rige arv-e-de navn, legitimitet - og flag - fra be-PAST-PART that the-NEU small-DEF realm inherit-PRET name, legitimacy - and flag - from e-n mellemstor, multinational stat ved indsejling-e-n til Østersø-e-n. a-COM medium.big-COM, multinational-COM state at entrance-DEF to Eastern.sea-DEF.

Also the historical experience of Denmark has to be rewritten under the impression of the fall of the Soviet Union and the revival of nationalism. Denmark is, it's true, still situated where it has always been, but we need a self reflection which explains how Denmark and the Danes have survived in a cold and dangerous world where things do not always turn out according to democratic merits. One of the reasons of the success of Denmark has been the internal social democratisation process. But of equal importance is the fact that the small kingdom inherited its name, its legitimacy - and its flag - from a medium size multinational state at the entrance of the Baltic Sea.

#### BIBLIOGRAPHY

- Andersen, Poul. 1954. Dansk fonetik. In P. Andersen and L. Hjelmslev, Fonetik. Copenhagen: Rosenkilde og Bagger [1967].
- Baron, Irène. 1996. Information structure and the anatomy of noun phrases. In E. Engberg-Pedersen et al., eds. 1996:235-259.
- Baron, I., M. Herslund and F. Sørensen, eds. 2001. Dimensions of Possession. Typological Studies in Language 47. Amsterdam-Philadelphia: John Benjamins.
- Basbøll, Hans. 1995. Degrees of stress in modern Danish: primary, secondary, tertiary. In J. Rischel and H. Basbøll, eds. Aspects of Danish Prosody. RASK Supplement, vol. 3, 21-47. Odense: Odense University Press.
- --. 1998. Nyt om stødet i moderne rigsdansk om samspillet mellem lydstruktur og ordgrammatik. Danske Studier 1998, 33-86. Copenhagen: Reitzel.
- Bauer, Laurie. 1978. The Grammar of Nominal Compounding with special reference to Danish, English and French. Odense: Odense University Press.
- Bertelsen, Henrik, ed. 1979. Danske Grammatikere fra midten af det syttende til midten af det attende Aarhundrede, I-IV. Copenhagen: Reitzel.
- Brandt, Søren. 1999. Modal Verbs in Danish. TCLC XXX. Copenhagen: Reitzel.
- Brink, L., J. Lund, S. Heger and J. Normann Jørgensen. 1991. Den store danske udtaleordbog. Copenhagen: Munksgaard.
- Davidsen-Nielsen, Niels. 1990. Tense and Mood in English: A comparison with Danish.

  Berlin: Mouton de Gruyter.
- --. 1996. Discourse Particles in Danish. In E. Engberg-Pedersen et al., eds. 1996:283-314.
- Diderichsen, Paul. 1946. Elementær dansk grammatik. Copenhagen: Gyldendal [1976<sup>3</sup>].
- Durst-Andersen, P. and M. Herslund. 1996. The syntax of Danish verbs. Lexical and syntactic transitivity. In E. Engberg-Pedersen et al., eds. 1996:65-102.
- Engberg-Pedersen, E., M. Fortescue, P. Harder, L. Heltoft and L. Falster Jakobsen, eds. 1996.
  Content, Expression and Structure. Studies in Danish Functional Grammar. Studies in Language Companion Series 29. Amsterdam-Philadelphia: John Benjamins.
- Engberg-Pedersen, E. and P. Harder, eds. 2001. *Ikonicitet og struktur*. University of Copenhagen: English Department.
- Fischer-Jørgensen, Eli. 1987. A phonetic study of the stød in Standard Danish. Annual Report of the Institute of Phonetics, University of Copenhagen 21:55-265.
- Glismann, Otto. 1986. Om tid og tempus. Nydanske Studier & Almen Kommunikationsteori 16-17:237-257.
- Grønnum, Nina. 1992. The Groundwork of Danish Intonation. Copenhagen: Museum Tusculanum.
- Grønnum, Nina. 1998a. Illustrations of the IPA. Danish. Journal of the International Phonetic Association 28:99-105.
- Grønnum, Nina. 1998b. Fonetik og fonologi. Almen og Dansk. Copenhagen: Akademisk Forlag.

- Gårding, Eva. 1977. The Scandinavian Word Accents. Travaux de l'Institut de Linguistique de Lund XI. Malmø: Gleerup.
- Halliday, M. A. K. 1985. An Introduction to Functional Grammar. London: Edward Arnold.
- Hansen, Erik. 1970. Sætningsskema og verbalskemaer. Nydanske Studier & Almen Kommunikationsteori 2:116-137.
- --. 1971. "Jensen er nede i postkassen med et brev". Konstruktioner med consubjectum i moderne dansk. Danske Studier 1971, 5-36. Copenhagen: Reitzel.
- --. 1980. Motorik und Lokalbestimmung einiger hochfrequenter verba ponendi im Dänischen. Festschrift für Gunnar Bech zum 60. Geburtstag. Kopenhagener Beiträge zur Germanistischen Linguistik. Sonderband 1, 189-198. University of Copenhagen: Department of Germanic Philology.
- --. 1990. Imperativens ortografiske form. In E. Engberg-Pedersen et al., eds. *Anvendt sprogvidenskab*, 191-202. Copenhagen: Museum Tusculanum.
- --. 1995. Sætningskløvning i moderne dansk. *Danske Studier 1995*, 126-146. Copenhagen: Reitzel.
- --. 1998. Kriterier for inddeling af ledsætninger. Ny forskning i grammatik 5, 7-22. Odense: Odense University Press.
- Hansen, E. and L. Heltoft. 1994. Kentaurnominaler i dansk. In I. Baron, ed. NORDLEX-Projektet. Sammensatte substantiver i dansk. LAMBDA 20:57-67. Copenhagen Business School: Department of Computational Linguistics.
- --. Forthcoming. Grammatik over det danske sprog.
- Hansen, Aage. 1967. Moderne dansk, 1-3. Copenhagen: Grafisk Forlag.
- Harder, P., L. Heltoft and O. Nedergaard Thomsen. 1996. Danish directional adverbs: Content syntax and Complex predicates. In E. Engberg-Pedersen et al., eds. 1996:159-198.
- Hare, R. M. 1971. Practical Inferences. London: Macmillan.
- Heltoft, Lars. 1986. Topologi og syntaks. En revision af Paul Diderichsens sætningsskema.

  Nydanske Studier & Almen Kommunikationsteori 16-17:105-13.
- --. 1992. The Topology of Verb Second and SVO Languages. In M. Herslund, ed. Word Order. Copenhagen Studies in Language 15:13-64.
- --. 1996a. Det danske nominals udtryks- og indholdssyntaks et dependensanalytisk forsøg.

  Ny forskning i grammatik 3, 7-34. Odense: Odense University Press.
- --. 1996b. Paradigmatic structure, word order and grammaticalization. In E. Engberg-Pedersen et al., eds. 1996:469-494.
- --. 2001a. Reanalysing Structure: The Danish definite article, its predecessors and development. Acta Linguistica Hafniensia 33:67-90.
- --. 2001b. Positivled, antiled og komitativled i dansk. *Ny forskning i grammatik 8*, 89-105. Odense: Odense University Press.
- --. 2001c. Datives and comitatives as neighbouring spouses. In I. Baron et al., eds. 2001:115-146.
- Heltoft, L. and L. Falster Jakobsen. 1996. Danish Passives and Subject Positions as a Mood

Bibliography

- System. In E. Engberg-Pedersen et al., eds. 1996:199-234.
- Herslund, Michael. 1984. Particles, Prefixes and Preposition Stranding. Nydanske Studier & Almen Kommunikationsteori 14:34-71.

119

- --. 1986a. The Double Object Construction in Danish. In L. Hellan and K. Koch Christensen, eds. Topics in Scandinavian Syntax, 125-147. Dordrecht: Reidel.
- --. 1986b. Causatives, Double Objects, and the Ergativity Hypothesis. In Ö. Dahl, ed. Proceedings of the Ninth Scandinavian Conference of Linguistics, 142-153. University of Stockholm.
- --. 1988. Tense, Time and Modality. In V. Rosén, ed. *Papers from the Tenth Scandinavian Conference of Linguistics*, vol.1, 289-300. University of Bergen.
- 1993. Transitivity and the Danish Verb. In M. Herslund and F. Sørensen, eds. The NORDLEX Project. Lexical Studies in the Scandinavian Languages. LAMBDA 18:41-62. Copenhagen Business School: Department of Computational Linguistics.
- --. 1995a. The Object Relation and the Notion of Incorporation. In L. Schøsler and M. Talbot, eds. Studies in Valency I. RASK Supplement, vol.1, 1-18. Odense: Odense University Press.
- --. 1995b. The Applicative Derivation and the "Spray Paint" Alternation in Danish. *University of Trondheim Working Papers in Linguistics* 25:43-59.
- --. 2000. Trois modèles de lexicalisation: les verbes de mouvement français, danois et russes. Voprosy Filologii 3 (6):74-78.
- --. 2001. The Danish -s Genitive: From Affix to Clitic. Acta Linguistica Hafniensia 33:7-18.
- Herslund, M. and F. Sørensen. 1993. Valence Theory. An Introduction to the Danish Project. In M. Herslund and F. Sørensen, eds. The Nordlex Project. Lexical Studies in the Scandinavian Languages. LAMBDA 18.1-22. Copenhagen Business School: Department of Computational Linguistics.
- --. 1994. A Valence Based Theory of Grammatical Relations. In E. Engberg-Pedersen et al., eds. Function and Expression in Functional Grammar, 81-95. Berlin-New York: Mouton de Gruyter.
- --. 1996. Introduction & Discussion. In N. Davidsen-Nielsen, ed. Sentence Analysis, Valency, and the Concept of Adject. Copenhagen Studies in Language 19:9-13, 143-157.
- Hvilshøj, Ulrich. 1999. Refleksivitet i dansk, sig og sig selv i et typologisk perspektiv. Ny Forskning i Grammatik 6, 81-105. Odense: Odense University Press.
- Jakobsen, Lisbeth Falster. 1996. Sentence Intertwining in Written Danish. In L. Heltoft and H. Haberland, eds. Proceedings of the 13th Scandinavian Conference of Linguistics, 109-121. Roskilde University: Department of Languages and Culture.
- Jensen, Anne. 2001. Sentence intertwining in Danish. In E. Engberg-Pedersen and P. Harder, eds. 2001:23-39.
- Jensen, Bente Lihn. 1999. V og V-konstruktioner på dansk. En parahypotaktisk konstruktion? Ny forskning i grammatik 6, 145-161. Odense: Odense University Press.
- Jensen, Per A. 1994. Genitive Phrases in Danish. In M. Herslund, ed. Noun Phrase Structures.

- Copenhagen Studies in Language 17:47-92.
- Jespersen, Otto. 1894. Progress in Language. London: Swan Sonnenschein.
- Karrebæk, Martha. 2001. The Impersonal Active Construction in Danish a classic revisited.
  In E. Engberg-Pedersen and P. Harder, eds. 2001:109-126.
- Mikkelsen, Kr. 1911. Dansk Ordföjningslære. Copenhagen: Hans Reitzel [1975<sup>2</sup>].
- Mithun, Marianne. 1984. The Evolution of Noun Incorporation. Language 60:847-894.
- Norde, Muriel. 1997. The History of the Genitive in Swedish. University of Amsterdam: Department of Scandinavian languages and literatures.
- Nygaard, M. 1906. Norrøn Syntax. Oslo: Aschehoug [1966<sup>2</sup>].
- Nølke, Henning. 1984. Clefting in Danish? Nydanske Studier & Almen Kommunikationsteori 14:72-111.
- Pedersen, Karen M. 2001. Præpositioner med dynamisk og statisk form. In P. Jarvad et al., eds. E som Erik, H som 70. Sproglige åbenbaringer. Festskrift til Erik Hansen, 164-171. Copenhagen: Hans Reitzel.
- Plank, Frans. 1989. From Cases to Adpositions. In N. Pantaleo, ed. Aspects of English Diachronic Linguistics, 17-61. Napoli: Schena Editore.
- Platzack, Christer. 1986. COMP, INFL and Germanic Word Order. In L. Hellan and K. Koch Christensen, eds. *Topics in Scandinavian Syntax*, 185-234. Dordrecht: Reidel.
- Rischel, Jørgen. 1972. Compound Stress in Danish without a Cycle. Annual Report of the Institute of Phonetics, University of Copenhagen 6:211-228.
- --. 1980. Phrasenakzent als Signal des Objekts ohne 'determiner' im D\u00e4nischen. Festschrift f\u00fcr Gunnar Bech zum 60. Geburtstag. Kopenhagener Beitr\u00e4ge zur Germanistischen Linguistik. Sonderband 1, 262-279. University of Copenhagen: Department of Germanic Philology.
- --. 1983. On unit accentuation in Danish and the distinction between deep and surface phonology. Folia Linguistica 17:51-97.
- Scheuer, Jann. 1995. Tryk på danske verber. RASK Supplement, vol 4. Odense: Odense University Press.
- Skautrup, Peter. 1942-1953. Det danske sprogs historie, 1-3. Copenhagen: Gyldendal.
- Sørensen, Finn. 2001. Modals and Modality. Some issues and some proposals. In H. H. Müller, ed. Reflections on Modality. Copenhagen Studies in Language 26:11-37.
- Thomsen, Ole Nedergaard. 1991. Unit Accentuation as an Expression Device for Predicate Formation in Danish. Acta Linguistica Hafniensia 23:145-196.
- --. 2001. Variational Typology of Contemporary Danish. In E. Engberg-Pedersen and P. Harder, eds. 2001:216-274.
- --. Forthcoming. Complex Predicates and Processing in Danish. In O. N. Thomsen and M. Herslund, eds. Complex Predicates and Incorporation. TCLC. Copenhagen: Reitzel.
- Togeby, Ole. 2001. Letledspladsen. In P. Jarvad et al., eds. E som Erik, H som 70. Sproglige åbenbaringer. Festskrift til Erik Hansen, 99-108. Copenhagen: Hans Reitzel.
- Wiwel, H. G. 1901. Synspunkter for dansk sproglære. Copenhagen: Det nordiske Forlag.