

# 1. Introduction

“Gender is the most puzzling of the grammatical categories” (Corbett 1991, 2)

The purpose of the present study is to show that gender is not so mysterious – despite Corbett’s famous statement above. To make a long story very short, I will argue that much confusion about gender dissolves if we acknowledge two principles. First of all, lexical gender, semantic gender, and formal gender constitute three distinct dimensions, with their own principles and their own primitives. Secondly, formal gender IS phonology, devoid of inherent meaning, but sometimes used to convey meaning.

The notion of **lexical gender** will not be of central importance in this paper, but, since it is traditionally associated with formal and semantic gender – and in my view confused with these categories – its relation to the other gender dimensions has to be disentangled. In the present study, the term lexical gender is viewed as a salient meaning component of a noun, usually referring to the animate–inanimate or the male–female dimensions. On a par with other meaning components of nouns, such as size, shape, color, direction, etc., of the denotation, this component does not correspond to any morphosyntactic features. Furthermore, lexical gender can be demoted; hence a noun such as *ombudsman* (representative.man) ‘ombudsman’, where the rightmost segment is *man* ‘man’, can refer to a woman too. Speaking in minimalist terms, lexical gender does not participate in checking, and does not correspond to any functional category.

**Semantic gender** is a cognitive category, conveyed by linguistic resources, normally by pronouns and/or inflection/agreement. For instance, by using the pronoun *she*, a speaker adds or confirms information about a discourse participant. In this case, the semantic gender, FEMININE, corresponds directly to a particular pronoun. However, I will argue that a semantic gender can be conveyed indirectly too. For instance, I will argue that the pronoun *den* (it.C) ‘it’ does not carry any negatively specified morphosyntactic features such as –ANIMATE or the like. But from the very fact that the pronoun *den* is chosen in a particular speech situation, not *hon* ‘she’ and not *han* ‘he’, it can (at least sometimes) be inferred that the referent in question

is not animate, i.e. that it is inanimate. Hence, there does not need to be a direct correlation between a particular pronoun and a semantic gender/cognitive category.

**Formal gender** operates in a quite different dimension. I will argue that formal gender is pure phonology. Formal gender does not have any meaning *per se*, but can be used to spell out other meaningful categories, for instance definiteness and indefiniteness, but also the presence or absence of number – which indeed has semantic import.

There is a typical mapping in many languages, such that nouns belonging to a certain lexical gender, in other words typically associated with a particular meaning component, tend to have a particular formal gender. For instance, in Swedish, nouns typically denoting animates are usually COMMON GENDER nouns, and German nouns denoting males are typically MASCULINE nouns. With the definition of lexical gender above: “Lexical gender is a salient meaning component”, we expect that meaning components other than those related to the dimensions ANIMATE/INANIMATE and MALE/FEMALE could be relevant for gender assignment; this seems indeed to be the case. One example is Steinmetz’s generalization that “Functional hollows are neuter” (Steinmetz 2006, 1496), with examples, such as German *Ei* ‘egg’, *Rad* ‘wheel’, and *Uhr* ‘clock’, which are all neuter – just like the corresponding nouns in the Scandinavian languages. We have to remember though, that this type of mapping is merely typical, and describes the most frequent cases, and that there are counterexamples or exceptions, for example *grotta* ‘cave’, *inneslutning* ‘containment’, and *klocka* ‘clock’, neither of which are neuter. If we say that the common gender of *grotta* ‘cave’ can be explained by the assumption that the meaning is not a ‘functional hollow’, in other words that it belongs to another semantic group, we run a very high risk of making *ad hoc* assumptions – drawing our linguistic map where it suits our theoretical purposes. Which formal gender a noun in languages such as Swedish, German, French, and Icelandic is assigned can sometimes be explained by meaning properties, but in other cases principles relating to form, i.e. phonological similarities to other words paradigms, are just as important. In many cases, however, formal gender is simply arbitrary. Derivational suffixes are particularly interesting when it comes to gender, as form tends to be more important than semantics in determining the formal gender of a noun. A well-known case is German *-chen*, which is a NEUTER suffix; hence the word that it heads is a NEUTER noun, regardless of its semantics. Thus, *Mädchen* ‘girl’ is NEUTER in German, despite its meaning.

As pointed out, formal gender and semantic gender are two completely separate dimensions – but there are links between the two. Formal gender is phonology, but at the same time it is one of the resources that can be used to convey a semantic gender distinction. For instance, it will be argued that the difference in meaning between the deictic pronouns *den* (it.C) ‘it’ and *det* (it.N) ‘it’, which carry the formal genders COMMON GENDER and NEUTER, respectively, is due to the presence vs. absence of a number feature. This difference in meaning is signaled – but not carried – by a difference in formal gender. It will be shown that the distinction between the formal genders COMMON GENDER and NEUTER can be used to signal other semantic differences too.

When it comes to personal pronouns, it seems that Swedish has four semantic genders, corresponding to the four third person pronouns: *han* ‘he’, *hon* ‘she’, *den* (it.C) ‘it’ and *det* (it.N) ‘it’, where the difference in meaning between *den* and *det* is the presence vs. absence of a number feature (this will be discussed in detail in chapter 2). However, if we take other types of pronominal categories into considerations, for instance *någon* ‘someone’ and *något* ‘something’, it appears that this pair expresses the ANIMATE–INANIMATE dichotomy, whereas the pair *vilken* ‘what person/thing’ vs. *vilket* ‘what’ expresses the distinction BOUNDED–UNBOUNDED (conveyed by the presence vs. absence of number). Thus, it turns out that semantic features can be bundled up in different ways, which, in turn, means that we cannot straightforwardly say that Swedish has four or two semantic genders.

My study is heavily influenced by a lively debate that took place in the 1980s, concerning the nature of pronouns. Two influential scholars that participated in this discussion were Peter Bosch and Francis Cornish, who argued that we need to make a distinction between referential and syntactic pronouns (in this study called Ref-pronouns and Syn-pronouns) in order to understand how pronouns function. Somewhat simplified, syntactic pronouns refer to linguistic entities, typically DPs. Ref-pronouns refer to non-linguistic referents. The antecedent of a Ref-pronoun can be motivated by the linguistic discourse, but its reference can be deictic too. Since there is, strictly speaking, no linguistic antecedents to Ref-pronouns, Bosch and Cornish prefer to talk about antecedent-triggers for such pronouns, not antecedents.

The very introduction of the term Ref-pronouns is important, since it challenges a deep-rooted idea that pronouns somehow “contain” the element that they refer to. According to such a view, a pronoun that refers to a clause would be clause-like in some respect. Bosch (1986)

calls this view “substitutionalism”. Substitutionalism is rooted in the early transformational approaches to pronouns, where it was assumed that pronominalization was a transformation where a clause or another element, present in the D-structure, was replaced with a pronoun, or transformed into a pronoun, in the S-structure. As a result, the element for which the pronoun stands would be “retained” throughout the derivation, though at a deeper level of representation. Bosch claims that the idea of substitutionalism still prevailed in the 1980s, when he wrote his seminal work, even though it was not always explicitly articulated. I suspect that we have reasons to believe that substitutionalism still prevails and influences much work done today. A major goal in this study has been to make precise in which cases and in which senses a pronoun structurally corresponds to an antecedent, for instance by sharing morphosyntactic features and structure, and in which cases the pronoun is related to an antecedent in other ways. Naturally, in the latter case no identity in structure is at hand. A guiding principle of this work has been not to assume more structure or features than needed. Unless motivated, one functional projection is always better than two or three.

This book is written in a general generative framework, such as Chomsky (1995). I have also assumed a general version of Distributed Morphology (see for example Halle & Marantz 1993). It has been an important goal, though, that the book should be accessible by linguists of different schools and theoretical viewpoints.

The book *Gender* by Greville Corbette is a seminal work for everyone who studies gender seriously – from a generative or a non-generative perspective. Corbett’s study covers a large number of the world’s language families. The question is of course whether it is justified to pursue more investigations on gender. The answer is yes. First of all, the present study is not an attempt to make a new version of *Gender*. My purpose is to make an in-depth study of the gender systems in one language, with glances at related languages. I am convinced that a proper understanding of the gender system in one language can help us to better understand the gender systems in other languages too. I also believe that a distinction between formal gender and semantic gender is imperative in order to understand what gender is and is not. For this reason a language, such as Swedish, where this distinction is easily perceived, is well suited for such a study. It is also my conviction that the terminology that linguists and grammarians use influences their analyses. For instance, it is unfortunate that the term MASCULINE is used to denote both a formal gender and a semantic gender in Germanic and Romance languages; there is a clear risk that this tradition obscures our way of analyzing gender, and brings an unwarranted focus on so-called hybrid nouns, i.e. nouns that can be

“pronominalized” in different ways. Instead of viewing “hybrid nouns” as an expected outcome of a system where reference could go to a DP antecedent, by way of a Syn-pronoun, or directly to a discourse antecedent, by way of Ref-pronouns, such nouns are often treated as anomalies. From such a perspective it was fortunate that the new formal gender that arose in Swedish as an outcome of the “great gender reduction” was termed UTER or COMMON GENDER, not MASCULINE or FEMININE; this terminology brings transparency to linguistic analyses.

A problem when writing about gender is the glossing and the idiomatic translations. To a certain extent glossing IS analyzing. A special problem in this study is the glossing of number, the presence vs. absence of which is important for the analysis. For this reason I have been restrictive in supplying the number feature in the glossing, which means that the absence of a number feature in the glosses does not automatically imply the absence of this feature. For instance, I have generally avoided providing any number features in general in the glossing of the pronouns *den* and *det*, which have been glossed *den* (it.C) ‘it’ and *det* (it.N) ‘it’, throughout the study. The same principle is applied to the corresponding pronominal determiners *den* and *det*. Similar problems adhere to translations: Throughout the book the pronouns *den* and *det* have been translated as ‘it’, even though a more elaborate translation could have been possible too, such as ‘it, that’, in some cases, or ‘he/she/it’ for *den*, in other cases.

The outline of the study is as follows: In chapter 2 I discuss the expression of gender in the noun phrase, with focus on nouns and adjectives. In chapter 3 I discuss gender on pronouns, which includes pronouns expressing formal and semantic gender. The topic of chapter 4 is so-called pancake sentences, which are sentences that appear to display disagreement in gender and/or number between the subject and a predicative adjective. The discussion on pancake sentences is followed up in chapter 5, with a look at Danish, with special focus on the gender system in Jutlandic. One of the points in this chapter is that the “pancake sentences” discussed in chapter 4, are the result of a change in the gender system that originated in the West Jutlandic dialect, and which has spread to rest of the Danish area, and further into Swedish. The topic of chapter 6 is the “the great gender reduction”, i.e. the change from a three-gender system of the German or Icelandic type, into the present-day two-gender system in (standard) Swedish. I do not attempt to investigate the details of this change in new ways, but to account for the change in terms of the framework developed in chapters 2 and 3, and to discuss the mechanisms for the change. Chapter 7 is a look at some other languages, in order to find out

to what extent the proposed system can be applied to these languages. Chapter 8 contains a summary and a discussion.

The following abbreviations will be used in this paper:

ACC	accusative
C	common gender
DEF	definite
FEM	feminine
INDF	indefinite
INF	infinitive
IMP	imperative
M	masculine
N	neuter
NB	number
NOM	nominative
PASS	passive
PL	plural
PRS	present tense
PST	past tense
PSTPTC	past participle
SG	singular
SUBJ	subjunctive
SUP	supine
SPL	superlative

Since Swedish finite verbs do not inflect for person or number, these categories are left out in the glossing of finite verbs.

## 2. Formal gender and lexical gender in noun phrases and adjectival phrases

In this chapter I discuss formal gender and its expression on nouns, determiners and adjectives. After an introduction in 2.1, in 2.2 I discuss simple noun phrases, i.e. noun phrases consisting of one word. The topic of 2.3 is complex noun phrases, in particular the expression of gender on adjectives – gender agreement. Section 2.4 is a brief consideration of lexical gender in relation to semantic gender.

### 2.1 Introduction

There is agreement in most textbooks of grammar that contemporary Swedish has two formal genders, usually referred to as COMMON GENDER (or UTER), and NEUTER. The formal gender of a noun determines, among other things, whether the form of the suffixed definite article is *-en*, as in *stol-en* ‘the chair’, or *-et*, as in *bord-et* ‘the table’.<sup>1</sup> The central question in this chapter is what this actually means, in other words what formal gender is.

When we learn a foreign language, where nouns display a distinction in formal gender, we have to learn the formal gender on a noun-by-noun basis, along with other lexeme-specific properties, such as the phonology of the root. Maybe this is the reason why we tend to think of gender either in terms of an abstract feature on a noun, a “marking”, or as a membership of a gender category. According to such views, the formal gender of the noun shows up on definite and indefinite determiners, but the very source of the gender information would be the noun root itself. This is probably why Hockett defines gender in terms of something that is different from the noun itself: “Genders are classes of nouns reflected in the behavior of associated words” (Hockett 1958, 231). Hockett’s definition has been influential, and lies behind much research on gender in human language, spelled out or as an underlying tacit assumption. My claim is not that Hockett was wrong in his supposition, but the point of departure for this chapter, as well as for the whole book, is slightly different. The main idea in this study is that lexical gender, semantic gender, and formal gender represent entirely

---

<sup>1</sup> Normally, a noun is either NEUTER or COMMON GENDER, but certain nouns have both possibilities, for example *paket* ‘parcel’; both *paket-en* (parcel-DEF.C) ‘the parcel’ and *paket-et* (parcel-DEF.N) ‘the parcel’ are grammatical. Such examples pose no problems for the analysis that will be proposed, and will not be discussed further.

different domains or dimensions. Formal gender is best viewed as morphophonology, more specifically as a piece of dummy morphology, devoid of meaning, which a language learner has to memorize, along with the phonology of the root. This piece of morphology carries no semantics *per se*, but can be used to make other morphological categories visible, categories that do have a meaning. For instance, when a child learns the lexeme *hus* ‘house’, it has to memorize the phonology of the root, /'hʉ:s/, as well as the fact that the definite form is /'hʉ:set/ (in written form *huset*), and the indefinite form /ɛt'hʉ:s/ (corresponding to *ett hus* ‘a house’).<sup>2</sup> In other words, the child has to learn to associate the concept #house# with the phonological form of the root /'hʉ:s/, as well as the phonological “attachment” – the formal gender – /ɛt/. To memorize the close connection between the phonological form of the root and the phonological form of the gender feature is akin to storing the parts of an idiomatic expression together in the long-term memory.

The example *hus* ‘house’–*huset* ‘the house’ illustrates the main point of this chapter: the whole purpose of formal gender morphophonology is to lexicalize, that is, to make visible, other morphological categories, in the case of *huset* ‘the house’ the category of definiteness, and in the case *ett hus* ‘a house’ indefiniteness.

In this chapter we investigate the expression of formal gender at different locations on the noun phrase in Swedish, more specifically on nouns and adjectives. In chapter 7 I will show that the basic idea, that formal gender is phonology, can be applied to other languages too.

The first thing that we need to establish is that formal gender is not meaningful *per se*, neither in Swedish nor in the other Mainland Scandinavian languages (with two important possible exceptions, in Jutlandic, which will be discussed separately in chapter 5, and in so-called “pancake sentences”, discussed in chapter 4).<sup>3</sup> Much research has been conducted in order to describe the principles of “gender assignment”, some of which have been assumed to be semantic in nature. As mentioned in chapter 1, an example is a suggested “rule” that would state that “functional hollows are NEUTER” (Steinmetz 2006; Rice 2006). The background to this rule is the observation that many nouns denoting round objects with a “meaningful” interior such as ‘clock’, ‘egg’, and ‘wheel’ are NEUTER in many Germanic languages for example Swedish *ur*, *ägg*, and *hjul*, and German *Uhr*, *Ei*, and *Rad*. In Norwegian, dairy

---

<sup>2</sup> Since (secondary) stress and word accent is not important for my investigation I refrain from marking such diacritics in the phonological transcripts.

<sup>3</sup> The idea that formal gender does not carry any meaning is not new. See for instance Sigurdsson (2009), who bases his argumentation primarily on Icelandic data.



products tend to be feminine (Trosterud 2006; Nesset 2006), which would be another semantic rule for gender assignment, and, according to Corbett (1991, 93), Russian names for towns on the left bank of Volga are feminine. Corbett (1991) goes as far as to say that, in fact, all gender systems have a semantic core.<sup>4</sup>

It is certainly true that one can discern tendencies in terms of semantics, when it comes to formal gender in Swedish too. For instance, nouns denoting inanimate, unbounded, and abstract entities display a tendency to be NEUTER. In addition, we also see that the formal gender classification of nouns follows smaller or larger patterns of analogy, each of which can be thought of as based on other sets of semantic properties, for instance *faxen* (fax.DEF.C) ‘the fax machine’ and *e-mailen* (e-mail.DEF.C) ‘the e-mail program’ vs. *faxet* (fax.DEF.N) ‘the fax message’ and *e-målet* (e-mail.DEF.N) ‘the e-mail message’. However, this does not mean that formal gender as such has a meaning. In my view it is impossible to find any feasible meaning component that would be common to all COMMON GENDER nouns, but absent in NEUTER nouns, and vice versa.

The conclusion is that there are tendencies when it comes to the matching of semantics and formal gender, but no strict correspondence. This held for earlier stages of Swedish too, when Swedish had a three-gender system. In this period, nouns denoting males were generally MASCULINE, whereas nouns denoting females were FEMININE, but this generalization did not always hold. For example, the noun *pappa* ‘daddy’ was formally a FEMININE noun in early modern Swedish, and *viv* ‘wife’ was NEUTER. Consequently, if we were to assume that formal gender has a meaning, the meaning of feminine gender would have to be formulated in such a way that it includes the word *pappa* ‘daddy’. We would also have to give a semantic explanation as to why *tiger* ‘tiger’ and *stol* ‘chair’ are COMMON GENDER nouns, whereas *lejon* ‘lion’ and *bord* ‘table’ are NEUTER in contemporary Swedish. A more reasonable assumption is therefore that groups of nouns that share similarities either in form or in meaning (or both), may form paradigms, but that formal gender as such does not carry any meaning. From the point of view of formal gender, the reason why *pappa* ‘daddy’ was feminine is that it ends in *-a*, which is the common denominator for the class of weak feminines. Other weak feminine nouns are *mamma* ‘mommy’, *gumma* ‘old woman’, and *flicka* ‘girl’. For nouns such as *stol* ‘chair’, *bord* ‘table’, *tiger* ‘tiger’, and *lejon* ‘lion’, there is no semantic rule that can provide an explanation, at least not a rule that would make any sense to contemporary speakers of

---

<sup>4</sup> For a recent study that claims formal gender to be semantic in nature in Swedish, see Åkerblom (2012).

Swedish. It is simply not possible to predict the formal gender of a noun on the basis of its meaning, and, conversely, if we know the formal gender of a never previously heard noun, we cannot predict its general meaning either.

Although formal gender does not carry any inherent meaning, it can be used to distinguish meanings. Consider the pairs of nouns below, which differ only in their formal gender classification. The nouns in the left column are COMMON GENDER nouns, whereas the ones in the right column are NEUTER nouns. All the nouns are in their definite form.

(2.1) a	<i>fax-en</i>	‘the fax machine’	<i>fax-et</i>	‘the fax message’
b	<i>bak-en</i>	‘the butt’	<i>bak-et</i>	‘the baking’
c	<i>visp-en</i>	‘the whisk’	<i>visp-et</i>	‘the stuff being whipped’
d	<i>lut-en</i>	‘the lye’	<i>lut-et</i>	‘the angle of a hill’
e	<i>kast-en</i>	‘the caste’	<i>kast-et</i>	‘the throw’
f	<i>pris-en</i>	‘the snuff pouch’	<i>pris-et</i>	‘the prize’
g	<i>e-mail-en</i>	‘the e-mail (program)’	<i>e-mail-et</i>	‘the e-mail (message)’
h	<i>as-en</i>	‘the Norse god’	<i>as-et</i>	‘the carcass’

If we look carefully at the examples in (2.1) we find no particular meaning component that is shared by the COMMON GENDER nouns in the left-hand column or the NEUTER gender nouns in the right-hand column; this is what we expect, given the discussion above. The formal gender marking, *-en* for the COMMON GENDER nouns, and *-et* for the NEUTER nouns, seems to have more of a phonemic status – the nouns in the left-hand and the right-hand column in fact form minimal pairs just like pairs such as *ben* /be:n/ ‘leg’ and *bet* /be:t/ ‘bit’ or *män* /mæn/ ‘men’ and *mätt* /met/ ‘satisfied’. A possible conclusion on the basis of (2.1) is that the formal gender feature is more like a phoneme – the smallest unit in a language that can distinguish meanings – than a morpheme – the smallest unit in a language that carries meaning. However, since it seems as though the phonological matrix of formal gender can consist of more than one phoneme, two in *hus-et* (house-DEF.C) ‘the house’ /'hū:sət/, it would be incorrect to speak about a gender phoneme; instead it seems to be a piece of dummy morphophonology, consisting of one or more phonemes, that does not carry any inherent meaning.

In certain respects the gender morphology could be compared to cranberry morphemes, which may convey a difference in meaning too, without carrying any semantics by themselves, for instance *körs* in *körs+bär* (KÖRS+berry) ‘cherry’, where *körs-* structurally corresponds to *blå-* ‘blue’ in *blå+bär* (blue+berry) ‘blueberry’ and *björn* ‘bear’ in *björn+bär* (bear+berry)

‘blackberry’.<sup>5</sup> The difference, as compared to cranberry morphemes, is that the formal gender morphemes are used systematically and that they operate in the morphosyntactic domain.

The idea that formal gender is phonology will be a guiding one in the rest of this study.

If we take the idea of late insertion seriously, no phonological features participate in the narrow syntax. The narrow syntax is where MOVE and MERGE apply, as well as feature checking. To account for word formation within a Distributed Morphology framework, I will apply the idea proposed in Halle (1990) that roots are represented by placeholders in the syntax, by Halle termed Q. At Spell-out – Vocabulary insertion – these placeholders are replaced by phonological matrices. Q will play an important role in the analysis to be presented in this chapter.

Before proceeding, let us first take a look at the positions where formal gender is expressed. We find the expression of formal gender both on the definiteness suffix and on the pronominal determiner in the singular (2.2a), on adjectives in their indefinite form (2.2b), on pronouns of various kinds (2.2c):

- (2.2) a     *den*     *röda*     *bil-en*     vs.     *det*     *röda*     *hus-et*  
               DEF.C   red.DEF   car-DEF.C   vs.   DEF.N   red.DEF   house-DEF.N.  
               ‘the red car’                        vs.     ’the red house’
- b     *en*     *röd*     *bil*     vs.     *ett*     *rött*     *hus*  
                      INDF.C   red.C   car     vs.   INDF.N   red.N   house  
                      ‘a red car’                        vs.     ‘a red house’
- c     *bil-en*     –     *den, denna*     vs.     *hus-et*     –     *det, detta*  
                      car- DEF.C   –   it.C, this.C   vs.   house-DEF.N   –   it.N, this.N  
                      ‘the car’     –   ‘it’, ‘this’     vs.   ‘the house’     –   ‘it’, ‘this’

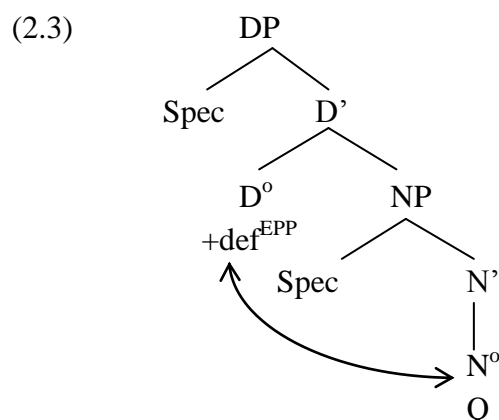
An analysis that claims to account for formal gender on nouns will have to provide an explanation for the formal gender features on determiners, pronominal modifiers and adjectives too. Let us start by looking at nouns. In section 2.3, the expression of formal gender on adjectives will be discussed. The expression of formal gender on pronouns will be the subject of chapter 3.

---

<sup>5</sup> In Swedish *cranberry* corresponds to *tran+bär* (crane+berry) ‘cranberry’. However, *tran-* cannot be considered a cranberry morpheme in Swedish, since it obviously corresponds to *trana* ‘crane’. (Tranbär/cranberries grow in marshlands, and are presumably assumed to be attractive to cranes, which dwell in such environments too.) The absence of the final *-a* is regular in the non-head position of Swedish compounds, cf. *ficka* ‘pocket’ + *tjuv* ‘thief’ → *ficktjuv* ‘pickpocket’.

## 2.2 Formal gender in simple noun phrases

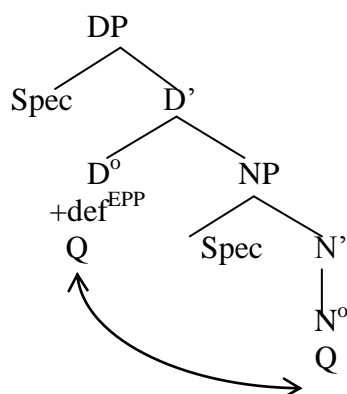
As (2.2c) shows, the definiteness suffix on nouns in the singular is inflected for formal gender. Let us now consider the derivation of a noun such as *hus-et* (house-DEF.N) ‘the house’. According to standard assumptions, MERGE creates a tree structure, such as (2.3), and a probe-goal relation is established between D and N. It is also generally assumed that the feature +definite on the D head has a strong EPP value in Swedish, which captures the fact that Swedish has overt determiners, as opposed to, say, Latin, which lacked definite determiners. (2.3) shows the basic structure of a simple, definite noun.<sup>6</sup> Since the phonology features are presumably not present in the narrow syntax, such features are represented by Q in the tree below. (Recall the idea that Q is a placeholder for phonology (Halle 1990).)



The basic idea is that once a probe-goal chain is established, in this case between D and N, a phonological feature can be realized in any of the positions in this chain (see for example Pesetsky & Torrego 2005; Platzack 2011, 243). Since operations of the narrow syntax apply before Vocabulary insertion, we may assume that Q, the placeholder for the phonological features of the root, is present in both positions:

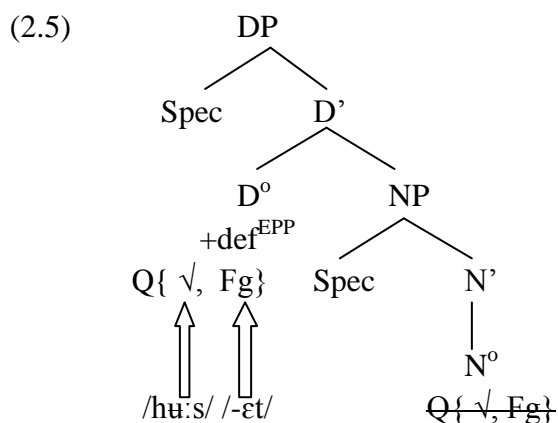
<sup>6</sup> It is possible that there are more functional projections in the noun phrase, but for my purposes the tree in (2.3) suffices.

(2.4)



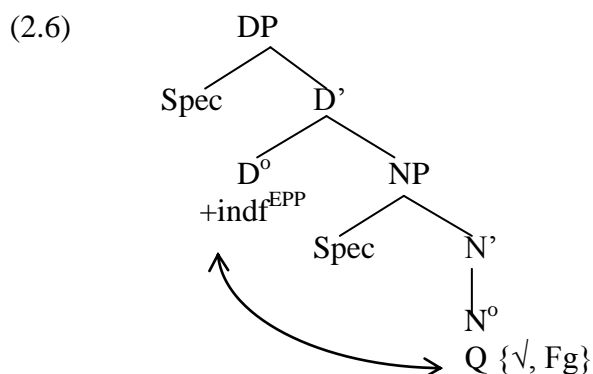
Let us now assume that the phonological representation of nouns consists of two parts, representing the phonological matrix of the “bare” root,  $\sqrt{\phantom{x}}$ , and Fg, the formal gender – in a language that has formal gender. (In a language such as English, Q would presumably consist of just the features of the root.) Such an assumption should not be very controversial; it formalizes the intuition that the formal gender is determined by the root, and, furthermore, that it does not have any inherent meaning, which was shown above. If this is correct, Q in (2.3) and (2.4) above could be rewritten as  $Q\{\sqrt{\phantom{x}}, \text{Fg}\}$ . The core idea behind this is that the knowledge of the phonology of a noun also requires the knowledge of the morphophonology of the formal gender that goes with it. As shown above, when it comes to the NEUTER noun *hus* ‘house’, a speaker of Swedish has to know that the definite form in the singular is /'hʉ:se/ , not /'hʉ:se/ , and that the indefinite form is /et'hʉ:s/ not /en'hʉ:s/ . Vocabulary insertion of the definite form *huset* ‘the house’ is illustrated in (2.5). Note that the formal gender feature and the phonological features of the root are inserted as separate phonological items in this particular case. This does not mean that the formal gender phonology is a word, only that speakers can distinguish the part of the word that is lexicalized by the formal gender as a separate item, in this case.<sup>7</sup>

<sup>7</sup> The Vocabulary Item /et/ probably carries prosodic information too, in this case the information /unstressed/ or /monomoraic/, which means that the morpheme is bound.



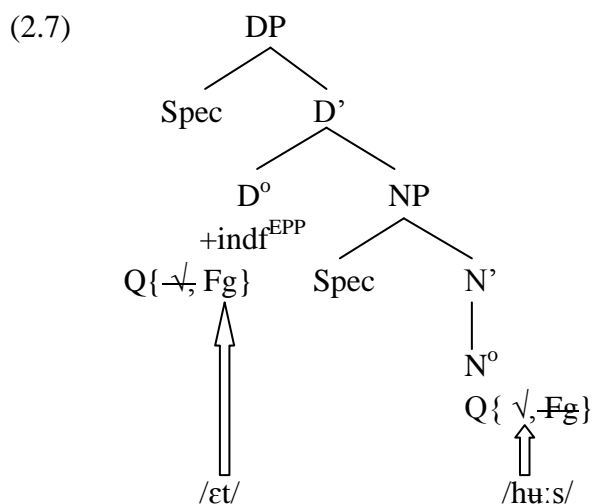
In the examples above, the formal gender phonology information is used for the spell-out of the +def feature. Pied-piping of the phonological features of the root takes place for reasons that are not clear, but which are not important for the proposed analysis.

The formal gender feature is used to spell out indefiniteness as well. Consider (2.6), which shows the structure at the point when checking has established a relation between D° and N°:



The derivation of an indefinite noun phrase, such as *ett hus* (INDF.SG.N house) ‘a house’ proceeds in basically the same way as described for the definite noun phrase *huset* ‘the house’. The main difference is that only Fg, moves in the overt syntax, that is, pied-piping of the phonological features of the root does not take place. The result is *ett hus* (INDF.SG.N house) ‘a house’.<sup>8</sup>

<sup>8</sup> The derivation of indefinite noun phrases, such as *ett hus* (INDF.SG.N house) ‘a house’ is probably more complex than shown here, since it might involve an intermediate projection, presumably a Quantifier Phrase.



The formal gender, Fg, in (2.7) corresponds to the Vocabulary Item /ɛt/, which is inserted in D, giving rise to *ett hus* (INDF.SG.N house) ‘a house’. As we have seen, the formal gender phonology is used to lexicalize or make visible the indefiniteness feature, formulated in generative terms, in order to satisfy the EPP on the D° head.

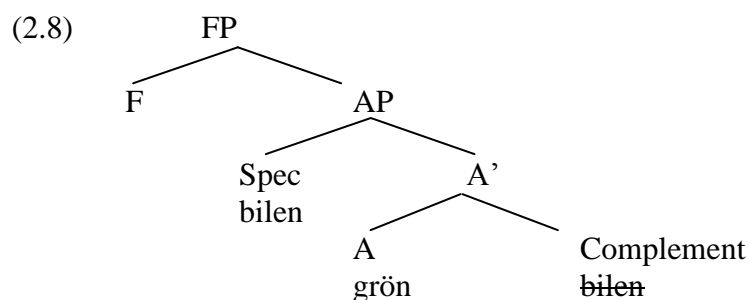
The reason why only Fg, corresponding to /ɛt/ moves in *ett hus*, whereas both the phonology of the root and Fg move in definite noun phrases is unclear; it could be accidental, or rather due to historical reasons; the indefinite determiner has developed from the numerals *en* (one.C) ‘one’ and *ett* (one.N) ‘one’. From a theoretical point of view, Swedish could just as well have developed a free definiteness marker, yielding *det hus*, much like the determiners in German or French. (Actually, such a development took place in West Jutlandic, see chapter 5.) And, had Swedish lost its formal gender system in the course of the historical development, as happened in English, definiteness would probably have been expressed in a different way, crucially without any formal gender marking on the definiteness suffix.

## 2.3 Formal gender and adjectives

If formal gender is a phonological attachment to the phonological matrix of a noun root, we need to account for adjectival agreement by using the same machinery as the one proposed in the previous section. Before doing so, we shall take a look at the basic structure of predicative and attributive adjectives.<sup>9</sup>

<sup>9</sup> For my purposes a very basic model of the noun phrase will suffice. This does not mean that I exclude the possibility of more functional projections in the extended projection of the noun.

For predicative constructions I will adopt the standard analysis, namely that the DP argument is merged in the complement of the adjective and raised to Spec AP (see for example Delsing 1993). The FP layer represents functional projections related to the adjective (primarily a Degree Phrase). In addition, functional projections related to the clause are merged on top of the FP, either a VP or a PredP (Bowers 1993). The tree in (2.8) shows the lower part of the tree that corresponds to the clause *Bilen är grön* (car.DEF.C is green) ‘The car is green’.

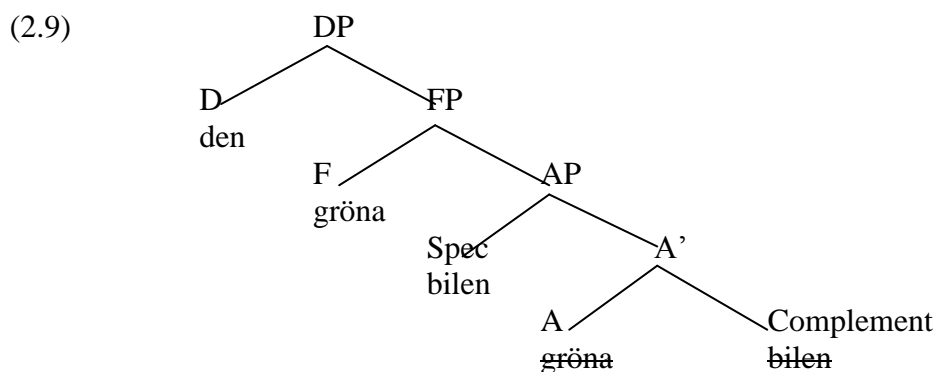


Whether the Complement-to-Specifier movement in (8) takes place in the narrow syntax or at some later level of derivation is not crucial at this point, but I will assume that the Spec-Head relation is the configuration where features of the specifier may be transferred from the noun phrase to the adjective, presumably by means of the operation Morphological merger (see for example Marantz 1988). Spec-Head is also the configuration in which features such as number and person are “transferred” to the verb in languages with subject-verb agreement.<sup>10</sup>

For attributive adjectives I follow Abney (1987, ch. 4) and Platzack (2011, 243), assuming that an attributive adjective is merged in the same configuration as in the predicative case, i.e. that the adjective takes a noun phrase as its complement. The tree below shows the structure of the DP *den grön-a bil-en* (DEF.C green-DEF car-DEF.C) ‘the green car’.

<sup>10</sup> The operation Morphological Merger is described in the following way in Marantz (1988, 261): “At any level of syntactic analysis (d-structure, s-structure, phonological structure), a relation between X and Y may be replaced by (expressed by) the affixation of the lexical head of X to the lexical head of Y.”





As in the predicative case (see (2.8)), the FP in (2.9) represents the functional layer of the AP (primarily of a Degree Phrase). The tree in (2.9) provides an immediate account of the observation that a pronominal determiner is obligatory when the noun combines with an adjectival modifier; in fact, the pronominal determiner is in a sense the adjective's own determiner.<sup>11</sup> (This determiner counts as the determiner for the DP as a whole, although the suffixed determiner on the noun is obligatory too in Swedish, viz. *det grön-a hus-et* (DEF.N green-DEF house-DEF.N 'the green house').)<sup>12</sup> Note that the adjective and the head noun are in a

<sup>11</sup> There are exceptions to the rule that noun phrases with adjectives require a pronominal determiner, for instance proper names and name-like NPs, for example *Röd-a hav-et* (red-DEF sea-DEF.SG) 'The Red Sea'. This is not crucial for my analysis.

<sup>12</sup> Marit Julien (p.c.), points out a potential problem with the structure in (9), namely that an adverbial modifier might be expected to take scope over all adjectives, which is not necessarily the case; in the DP *en mycket stor, röd bil* 'a very big, red car' the modifier *mycket* 'much' takes scope only over *stor* 'big', not over *röd* 'red'. This problem can be solved if we assume that multiple adjectives are separated by a conjunction phrase, which closes off the scope of the adverbial modifier. (This is, in fact, what the conjunction does in predicative constructions.) A difference between predicative APs and attributive ones would be that the spell-out of the conjunction is obligatory in predicative constructions but optional in attributive ones:

- (i) *Bil-en var mycket stor \*(och) röd.*  
car-DEF.SG.C be.PST very big.C \*(and) red.C  
'The car was very big and red.
- (ii) *en mycket stor (och) röd bil*  
a.C very big.C (and) red.C car(C)  
'a very big (and) red car'

In attributive constructions, such as (ii) above, the conjunction is normally marked with a comma (in written language), which indicates a prosodic break:

- (iii) *en mycket stor, röd bil*  
a.C very big.C, red.c car(C)  
'a very big, red car'

Spec-Head configuration in the AP, which is identical to the configuration in the corresponding predicative adjective construction. The fact that predicative adjectives are never inflected for definiteness, whereas attributive adjectives are, falls out as a direct consequence of the proposed structure; a predicative AP is selected by a VP (or a PredP, as suggested in Bowers (1993)), whereas an attributive adjective is always selected by a Definiteness head, hosting the prenominal definite article. The details of this will be elaborated below.

Let us first take a look at predicative adjectives, exemplified in (2.10). If the subject of the clause is in the plural, as in (2.10b), there is no agreement in formal gender on the adjective:

- (2.10) a *Hus-et var grön-t.*  
house-DEF.N be.PST green-N  
‘The house was green.’
- b *Hus-en var grön-a.*  
house-DEF.PL be.PST green-PL  
‘The houses were green.’

Plural inflection thus seems to “cancel”, or override, inflection in formal gender. (2.11) shows that an attributive adjective can be inflected for definiteness, uniformly *-a*. (Only attributive adjectives are inflected for definiteness.)

- (2.11) a *den grön-a bil-en*  
DEF.C green-DEF car-DEF.C  
‘the green car’
- b *det grön-a hus-et*  
DEF.N green-DEF house-DEF.N

---

A similar state of affair holds, in fact, for verbs, where adverbials can take scope over the higher verb in a verb chain. Consider (iv) and (v). (Note that *vilja* ‘want’ is a typical auxiliary; it does not take a control infinitive clause as its complement.)

- (iv) *Han har i Småland velat köpa en ny bil.*  
he have.PRS in Småland want.SUP buy.INF INDF.SG.C new.C car(C)  
‘When in Småland he has wanted to buy a new car.’
- (v) *Han har velat köpa en ny bil i Småland.*  
he have.PRS want.SUP buy.INF INDF.SG.C new.C car(C) in Småland  
‘He has wanted to buy a new car in Småland.’

In (iv) the locative adverbial *i Småland* ‘in Småland’ denotes the location for the mental act of wanting, conveyed by the verb *vilja* ‘want’, whereas it is ambiguous between taking scope of *vilja* ‘want’ and *köpa* ‘buy’ in (v).

	‘the green house’		
c	<i>de</i>	<i>grön-a</i>	<i>bil-arna/hus-en</i>
	DEF.PL	green-DEF	car-DEF.PL/house-DEF.PL
	‘the green cars/houses’		

If an adjective is inflected for definiteness, that is with *-a*, this inflection seems to cancel inflection in plural.

Two conclusions can be drawn from this set of data: First of all, a Swedish adjective requires inflection (which in some cases is  $-\emptyset$ ). Secondly, there seems to be a scale that determines what inflection is realized or spelled out on the adjective. Using DM terminology, we may assume that there is only one slot for Vocabulary insertion, and that Vocabulary Items compete for this slot. If the terminal node is marked for definiteness, a Vocabulary Item provided with this feature wins over plural. If the node contains a plural feature, a Vocabulary Item marked for this feature wins over a Vocabulary Item marked for formal gender. This is illustrated in (2.12):

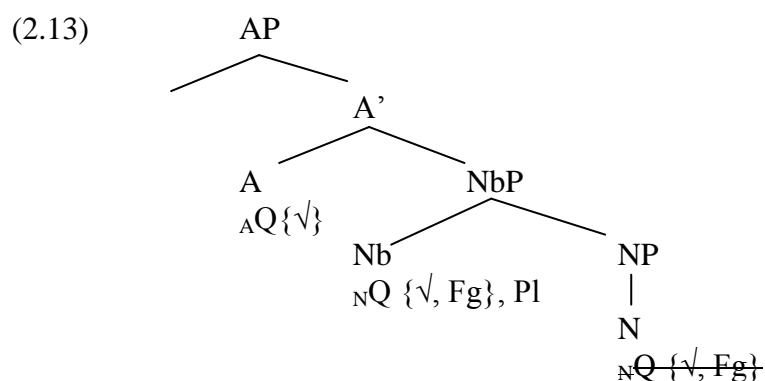
(2.12)            definiteness > plural > formal gender

If no other inflection is available, the adjective is inflected for formal gender; hence inflection in formal gender is a last resort source for inflection. Another option would have been to assume that formal gender within the DP may spell out the feature singular. I will assume that the first alternative is the correct one. The reason is that formal gender is expressed on indefinite noun phrases without an indefinite determiner too, for example *rött vin* (red.N wine) ‘red wine’, where the absence of a determiner *ett* (a/one.N) ‘a/one’ corresponds to an unbounded reading of the noun phrase, in other words a strict SUBSTANCE reading. According to the analysis that will be presented below, a noun phrase such as *rött vin* (red.N wine(N)) ‘red wine’ lacks a number feature altogether. The same inflection is used if the noun phrase contains an indefinite determiner/numeral, *ett rött vin* (INDF.NB.N red.N wine(N)) ‘a kind of red wine’. If an adjective is inflected for formal gender in cases where there is no number feature, the formal gender cannot be assumed to express a number feature.

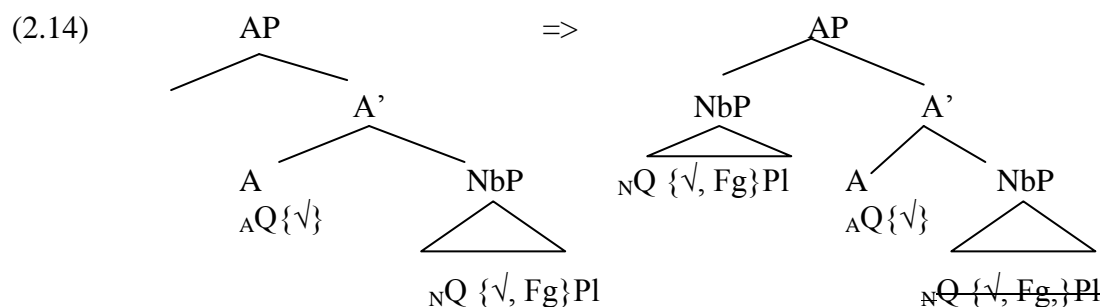
Let us now consider a suggestion as for the details of the machinery that “handles over” the formal gender features, from the noun to the adjective in different configurations. Let us start with predicative adjectives.

In what follows, I will use the label  $_N Q$ , to indicate the placeholder for the phonology of a simple noun such as *hus-et* (house-DEF.N) ‘the house’;  $_A Q$  is a placeholder for the phonological features of the adjective. The subscripts are just mnemonic devices and have no theoretical status. Also remember that  $Q$  for a noun could be rewritten as  $_N Q \{ \checkmark, Fg \}$  in languages with a formal gender system, such as Swedish. As before,  $Fg$  stands for formal gender.

First consider an AP where the complement of the adjective is a noun phrase in the plural. As pointed out above, the formal gender feature,  $Fg$ , has basically the same status as the phonology of the root; hence it is embraced by the curly brackets. Phonological features are not present, or at least not active in the syntactic derivation. The feature SINGULAR or PLURAL is added in a Number Phrase, an NbP, at the next level. The noun phrase complement in (2.13) is assumed to be in the plural, which attaches outside  $Q$ .



What is crucial is that certain features of the noun phrase complement will have to be transferred to the adjective. As assumed above, the NP, or rather the placeholder  $_N Q \{ \checkmark, Fg \}$  and the feature PLURAL in (2.13), i.e. the whole set of features that relate to the noun phrase, moves from the complement to the specifier of the adjective:

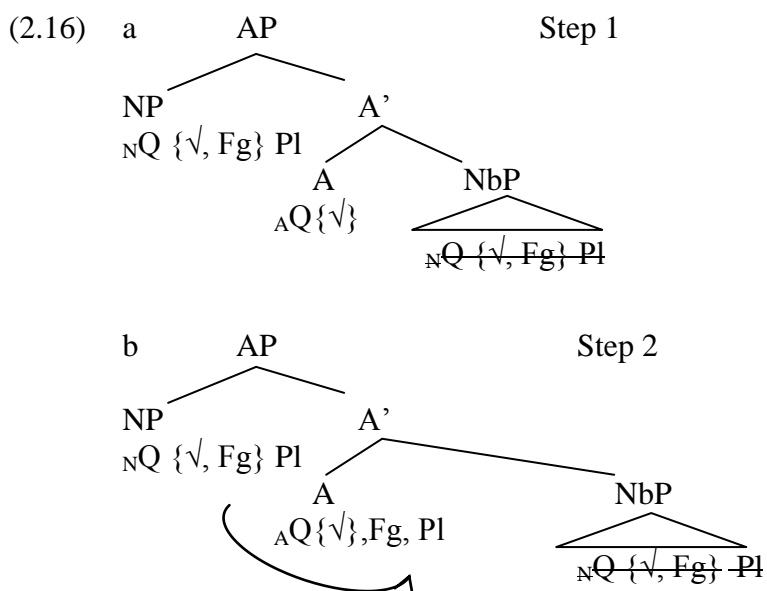


The trees in (2.14) illustrate Spec-Head agreement, which we find in predicative constructions in Swedish. Within a copying framework there is nothing in principle that would block a multiple spell-out of features, in other words that a feature may be exposed both on the

Consider (2.15):<sup>13</sup>

- b *Hus-en*                      *var*                      *grön-a*.  
house-DEF.PL                be.PST                green-PL  
'The houses were green.'

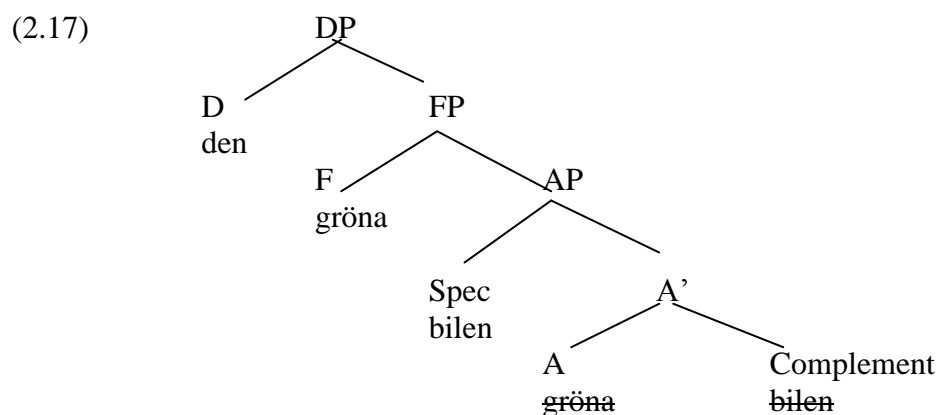
in (2.16b) below:



meaning (although it might be functional by facilitating parsing).

<sup>13</sup> There is nothing in the proposed analysis that predicts (overt) agreement to be obligatory in a language. In the dialects of the northern parts of Sweden, predicative adjectives do not agree in plural, for instance, and within the proposed model this means that the feature Plural is transferred from the noun phrase to the adjective via Spec-Head agreement, but that no vocabulary item (or possibly /Ø/) is inserted.

So far we have looked at predicative adjectives. Let us now consider attributive adjectives. The system works basically in the same way, but the difference is that the FP is selected by a definiteness head. The tree in (2.17) shows the basic structure of the definite noun phrase *den gröna bilen* (DEF.C green.DEF car.DEF.C) ‘the green car’:

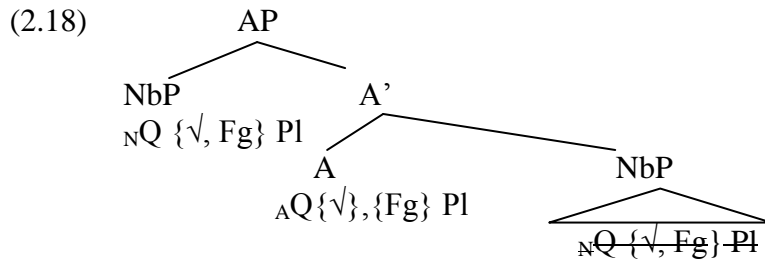


As pointed out above, a general idea within generative theory is that the result of a probe-goal relation is feature sharing (see for example Pesetsky & Torrego 2005; Platzack 2011, 243). A probe-goal relationship holds between the D head and A, by way of the head F, in the tree in (2.17). A probe-goal relation is also established between D and the noun phrase in Spec AP. My proposal is that the formal gender feature that ends up on the topmost D head in (2.17), is the result of the D-F-A chain, not primarily a result of the Spec-Head relation being established between the adjective and the noun phrase argument in Spec AP. F is a closer target than the constituent in SpecAP. Importantly, this means that the determiner in noun phrases with adjectival modifiers relates to the adjective, the adjective and the D head being part of the same head chain. This explains why a prenominal determiner is obligatory whenever a noun is modified by an attributive adjective, but not when the noun is unmodified.

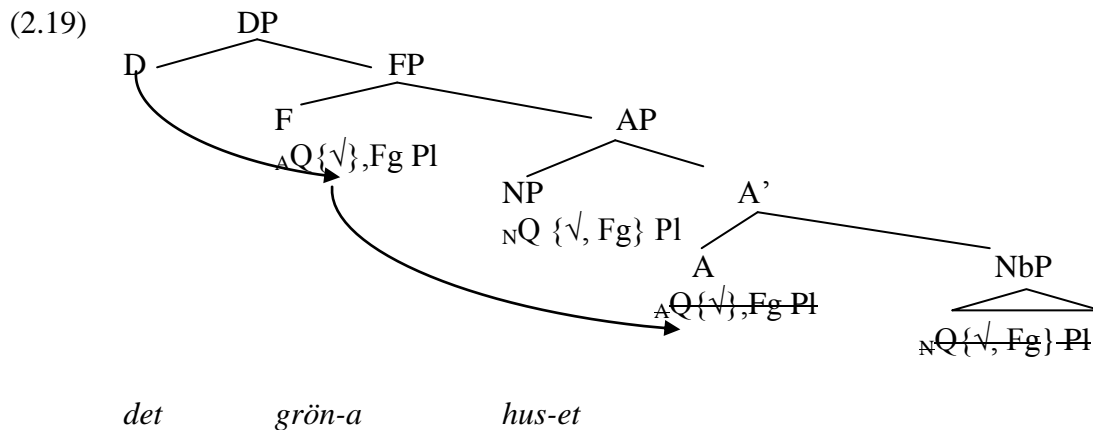
I have provided an account as to how the formal gender morphology ends up on the prenominal determiner. Why such inflection is obligatory is an entirely different question – other languages, such as English, can apparently do well without formal gender morphology. My tentative answer is that the EPP feature on definiteness in the Scandinavian languages is satisfied by gender inflection on the D head. (The status of the initial element, *d-*, is a bit unclear. One option, suggested by Cardinaletti & Starke (1999: 193f), is that *d-* is a “support element”.) The gender feature on the pronominal determiner would be needed only for reasons of phonology, for the sake of morphophonological wellformedness. Informally

speaking, a determiner or a Swedish adjective must have some kind of inflection, and, if there is nothing else available, the formal gender feature takes on this role.

We shall now turn to agreement on attributive adjectives. Consider the tree in (2.18), which shows the lower part of an attributive adjective. (It is identical to that of predicative adjectives.)  $_{N}Q$  has moved from the head of the NP, landing in the NbP, landing in Spec AP.



In the next step of the derivation, the functional projections relating to the adjective, in particular comparative/superlative, hosted in the FP, and the DP level are merged on top of the AP. Just as in a predicative construction, the attributive adjective moves to FP, probably for reasons of checking (or for the sake of EPP). The probe-goal relations that are established are indicated in (2.19):



The order of phonological items (“morphemes”) in the DP *det grön-a hus-et* (DEF.N green-DEF house-DEF.N) ‘the green house’ reflects the derivation above: The formal gender part *-et* is an expression of the formal gender of the noun, information that is transferred to the adjective via by Spec-Head agreement in the AP, and spread to the determiner head by way of the D-F-A chain, as argued above.

As pointed out above, the proposed analysis explains why only attributive adjectives are inflected for definiteness; an adjective cannot be inflected for definiteness unless it is dominated by a DP. Predicative adjectives are never dominated by a DP.

The question about double definiteness, i.e. the fact that definiteness is expressed both on the nominal head and on the prenominal determiner has been discussed vividly in the literature (see, for example, Delsing 1993; Santlemann 1993; Julien 2005; Vangsnes 1999). The proposed analysis contributes nothing substantial to this discussion. However, the “true” determiner in DPs with an adjectival modifier is the prenominal one – the suffixed determiner on the noun is merely a doubling element. There is probably no deep syntactic reason as to why Swedish and Norwegian have double definiteness, but not Danish. It is indeed the case that the doubling element indicates that a relation of some sort holds, but the same relation does presumably hold between elements in the same configuration in languages without double definiteness too. In a noun phrase such as *den grön-a bil-en* (DEF.C green-DEF car-DEF.C) ‘the green car’ there is just one argument, represented by the DP level and two predicates, *green* and *car*; in other words, the referent is both ‘green’ and ‘car’. This indicates that the element merged in the complement position of the adjective in (2.19) is not a full DP. One option is that it is a deficient DP, but where the definiteness of the noun is identified/conflated with the definiteness of the adjective (i.e. the prenominal article), another that it is an NbP or an NP. Further investigations are out of scope for our purposes here, so the discussion will not be pursued.

I have assumed that there is just one slot for adjectival inflection in Swedish, and that the phonological insertion of inflection is determined by competition. The formal gender feature reflects the default or elsewhere case. However, there are two cases where it seems as though the adjectival inflection slot may contain a portmanteau morpheme, expressing more than one feature value. Although somewhat obsolete (even absent in certain language varieties), definite adjectives may inflect for masculine, singular:<sup>14</sup>

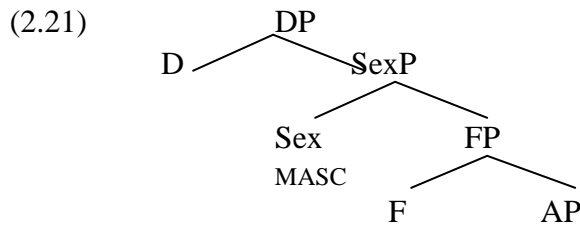
- (2.20)      *den*      *arg-e*      *kung-en*  
                  DEF.C    angry-MASC    king-DEF.C  
                  ‘the angry king’

---

<sup>14</sup> The “meaning” of *e*-inflection on adjectives seems to be in a state of flux in present-day Swedish. See Jobin (2012) for more discussion.



It is clear that the feature MASCULINE is semantically meaningful; hence, it is reasonable to assume that it corresponds to a functional projection. Since it is quite possible to use a determiner + an adjective, inflected with *-e*, for instance *den ond-e* (DEF.C evil-MASC) ‘the evil one’, without a head noun, I assume that the *e*-inflection in question derives from a projection within the functional sequence of the adjective. This functional projection is presumably located above the FP, but below the DP. Since this projection encodes natural gender or sexus, I label it a SexP.



Since we do not find noun phrases such as *\*en arg-e kung* (INDF.SG.C angry-MASC king(C)) (which should be compared to *den arg-e kungen* in (2.20)), we may conclude that the inflection *-e* on *arge* ‘angry’ in (2.20) encodes both DEFINITENESS and the feature MASCULINE, in other words that *-e* on the adjective is a portmanteau morpheme.

There is no corresponding adjectival feminine inflection, and since the *-e* inflection on nouns denoting males seems to be optional, the conclusion should be that the SexP is optional within the adjective’s extended projection.

Let us take a closer look at the construction type where there is no (overt) head noun:

- (2.22) *den god-e, den ond-e, den ful-e*  
 DEF.C good-DEF.MASC DEF.C evil-DEF.MASC DEF.C ugly.MASC.DEF  
 ‘the good one, the evil one, the ugly one’

The denotations of the DPs in (2.22) are unambiguously male persons. We have no reason to believe that any of the DPs in (2.22) contains a deleted head noun; the null hypothesis is that the complement of the DP is simply an AP in these cases.<sup>15</sup> However, since expressions such

<sup>15</sup> It is important to point out that the proposed analysis does not preclude a deleted head noun in examples such as (i) below, where there is a head noun candidate in the linguistic context:

- (i) *Tänker du på den ung-e mannen*  
 think.PRS you of DEF.C young-DEF.MASC man.DEF.C  
*eller den gamle?*  
 or DEF.C old.MASC

as those in (2.22) can refer only to single persons, there has to be a NbP somewhere below the DP level.

The feature SUPERLATIVE may sometimes co-occur with DEFINITENESS (and MASCULINE). In examples such as (2.23b) the suffix *-st* expresses the superlative, whereas, *-e* is a portmanteau morpheme, spelling out DEFINITENESS and MASCULINE (possibly also SINGULAR).

- (2.23) a *den högst-a bergstoppen*  
 DEF.C high.SPL.DEF mountain.top.DEF.C  
 ‘the highest mountain top’
- b *den högst-e minister-n*  
 DEF.C high.SPL.MASC.DEF minister-DEF.C  
 ‘the highest minister of state’

However, the possibility of simultaneously expressing superlative and agreement is restricted to the few adjectives that have a short form of the superlative, *-st*. The long form, ending in *-ast* (which is the default alternative), does not allow the simultaneous presence of other types of inflection; it is uniformly *-e*, *dummaste* ‘highest’, not *\*dummasta*. This means that, in the latter case, the superlative suffix cancels other agreement candidates. The comparative forms have similar properties. One way of formalizing this would be to assume that the short superlative in (2.23) above, *-st*, is not a suffix, but part of the stem, and that the sole slot for inflection is occupied by *-e* in (2.23b).

Another problem related to the spell-out of the formal gender features is that it is not always /t/ for NEUTER and /n/ for COMMON GENDER. If the noun phrase is indefinite, inflection on the adjective is *-t* if the noun is in the NEUTER, as shown in (2.24) otherwise it is  $\emptyset$ :

- (2.24) a *ett gul-t hus*  
 INDF.N yellow-N house(N)  
 ‘a yellow house’
- b *en gul/\*gul-n bil*  
 INDF.C yellow/yellow-INFL car(N)

What (2.24) shows is that it is rather unproblematic to assume that the NEUTER feature always corresponds to the phonological piece /t/. COMMON GENDER, on the other hand, is more difficult; it looks as though we have to assume (at least) two allomorphs, /n/ and  $\emptyset$ /. The

---

‘Are you thinking about the young man or the old (one)?’

phonological marker /Ø/ is used on adjectives, /n/ or /ɛn/ in other contexts, for example *gul* ‘yellow’ in *en gul bil* ‘a yellow car’, not \**en guln bil*.

## 2.3 Lexical gender and semantic gender

In the previous section I suggested that the functional projection of the adjective may optionally contain a SexP, where natural gender or sexus is encoded. A question is of course whether nouns typically denoting males have a SexP in their extended projection, obligatorily or optionally. The answer seems to be that this is not a necessary, hence not a desirable, conclusion, at least not for simple nouns. Recall that it is the adjective that inflects with *-e*, in cases such as *den nye* ‘the new one’, repeated below. There is no particular MASCULINE adjectival inflection on nouns:

- (2.25) *den ny-e*  
 DEF.C new-DEF.MASC  
 ‘the new one’

To assume that the SexP can be part of the AP only, but not of the NP, offers a desirable solution; no other mechanism is needed. With the proposed model both N and A are predicates – the argumental and referential properties of a noun phrase derive from the DP level. In a noun phrase, such as *den ny-e minister-n* (DEF.C new-DEF.MASC minister-DEF.C) ‘the new member of the government’, there are two predicates: *ny* ‘new’ and *minister* ‘member of the government’, embedded under one DP, which means that there is just one referent.

There are simple nouns have a meaning that includes meaning components such as ‘male’ and ‘female’, for instance *man* ‘man’, *kvinna* ‘woman’, *kung* ‘king’, and *drottning* ‘queen’. (This is what motivates Dahl (1999) to assume that these nouns have a lexical gender.) However, to assume that lexical gender is a morphosyntactic feature would mean that we would have to assume that some nouns have such a feature, whereas others would be either underspecified or unspecified. Consider (2.26):

- (2.26) *Titta på doktor-n! Hon svimmar.*  
 look.IMP at doctor-DEF.C she faint.PRS  
 ‘Look at the doctor! She is fainting!’

Note that it is the pronoun *hon* in (2.26) that reveals/adds/evokes the natural gender of the referent. We have to keep in mind that there are not very many nouns that unambiguously denote only men or only women. A great number of nouns that denote humans are sex-neutral, for example *doktor* ‘doctor’, *lärare* ‘teacher’, *smed* ‘blacksmith’ etc. The fact that, for example, there are more male blacksmiths than female ones should presumably not be encoded in terms of morphosyntactic features, inherent in a word. Furthermore, nouns that typically denote inanimates can also be used to refer to humans. The example below is modeled on the famous “apple juice seat” example from Lakoff & Johnson (1980):

- (2.27) *Kolla på krokodil-handväskan. Hon vill betala.*  
 check.out.IMP on crocodile-purse.DEF.C she want.PRS pay.INF  
 ‘Look at the crocodile purse. She wants to pay.’

To assume that *krokodilhandväska* ‘crocodile purse’ would have the feature feminine (maybe optionally) in the lexicon is unintuitive. It would explode the lexicon, and explanatory value would be lost. Once again the lexicon would be the *deus ex machina* that would solve syntactic problems that would otherwise seem unsolvable. Yet another problematic type of examples is given in (28):

- (2.28) *Gick du på den gubben?*  
 walk.PST you on that.C old.man.DEF.C  
 ‘Did you fall for that joke?’

It is very difficult to tell whether the use of *gubben*, lit. ‘the old man’ in (2.28) is related to the everyday use of the word *gubbe*. So, if we take a closer look at the word-stock and consider the great amount of flexibility as to how words can be used, it seems utterly uneconomical to assume that a few words (*man* ‘man’, *kvinna* ‘woman’, *kung* ‘king’, *drottning* ‘queen’, *pojke* ‘boy’, *flicka* ‘girl’ ... ) would carry a morphosyntactical lexical gender feature, whereas others would lack this feature, or could have it to some extent, in particular by virtue of metonymy or metaphorical extension. My conclusion is therefore that we have no reason to assume that common nouns carry features such as MASCULINE or FEMININE as part of their morphosyntactic feature setup, although the corresponding semantics may be an important part of their meaning. As we shall see in chapter 3, we arrive at a simpler solution if we assume that pronouns provided with features such as MASCULINE and FEMININE impose their features on the discourse referents in question. If the nouns typically denote females or males, for

instance *kung* ‘king’ and *drottning* ‘queen’, the use of *han* ‘he’ and *hon* ‘she’ as anaphoric pronouns rather confirms typical meaning properties.

I have argued that nouns such as *smed* ‘blacksmith’ and *minister* ‘member of government’ do not have a feature, such as MALE or FEMALE, as part of their feature setup, hence not the corresponding functional projection. However, there are a number of derivational suffixes, encoding the feature FEMININE, for instance *-inna*, as in *grev-inna* (count-FEM) ‘countess’ or *-ska*, as in *sömmer-ska* (sewer-FEM) ‘seamstress’. For such nouns, we have reasons to believe that the NP contains a SexP, hosting the derivational suffix, and that the base noun moves left-adjoining to the suffix. However, the semantic value of such suffixes seem to be eroding in modern Swedish, and for a word, such as *sjuk+sköter+ska* (sick+keeper+FEM) ‘nurse’, the feature FEMININE seems to have been lost. Other “female derivational suffixes” are less and less used.

Another argument indicating that there is a difference in principle between lexical gender – which is merely a salient meaning component – and semantic gender, the meaning of which is conveyed by pronominal resources, is illustrated in (2.29) below:

- (2.29) a *Jag träffade kungen. #Hon var glad.*  
           I meet.PST king.DEF.C. she be.PST happy.
- b *Jag träffade honom. \*Hon var glad.*  
           I meet.PST him. She be.PST happy.

A coindexation of *honom* ‘him’ and *hon* ‘she’ in (2.29b) is straightforwardly ungrammatical. A similar coindexation between *kungen* ‘the king’ and *hon* ‘she’ in (2.29a) is pragmatically quite odd, but the sentence can be interpreted: *kungen* ‘the king’ could stand for ‘the best’, the king could also be the character of a play, where the actor is women. If we characterize (2.29a) as pragmatically odd, but (2.29b) as ungrammatical (assuming a coindexation of *kungen/honom* ‘the king’/‘him’ and *hon* ‘she’ in both cases), we conclude that lexical gender is different from semantic gender inherent in the pronouns *han* ‘he’ and *hon* ‘she’.

In short, the conclusion is that what is usually referred to as a lexical gender is a salient meaning component, irrelevant to the syntax.

## 2.4 Summary and conclusion

In this chapter I have suggested that formal gender on nouns and adjectives is a piece of morphophonology, without meaning, with the allomorphs /ɛt/ or /t/ for NEUTER and /ɛn/, /n/, or /Ø/ for COMMON GENDER. This feature is best viewed as a phonological attachment to the phonological matrix of the noun, and it is used “when needed”, to spell out features such as definiteness or indefiniteness on the nouns, and agreement on the adjective.

### 3. Formal and semantic gender on pronouns

In a number of seminal studies (Teleman 1965, 1969, 1987), Teleman develops the idea that a distinction has to be made between semantic gender and grammatical gender (in this study termed formal gender).<sup>16</sup> In my view, such a distinction is imperative for a proper understanding of the nature of gender in human languages; formal gender and semantic gender are two separate dimensions. In chapter 2, I argued that formal gender is morpho-phonology, in fact dummy morphology that can be used to spell out or lexicalize the features +DEFINITE and +INDEFINITE, in relation to a noun. Semantic gender is something completely different; it is a cognitive category, a category of thought, conveyed by linguistic resources, primarily pronominal ones. However, there are links between formal and semantic gender; as we shall see, formal gender is one of the linguistic resources that is used to convey a semantic gender. What may blur the picture is that pronouns expressing a semantic gender are sometimes homophonous to pronouns expressing solely a formal gender. However, once we have recognized this, the picture becomes clearer.

#### 3.1 Semantic genders – a way of categorizing the world

One of the main points of chapter 2 was that formal gender is best viewed as dummy morpho-phonology that is intrinsically tied to the phonological matrix of a nominal root. This piece of phonology, /ɛt/ or /t/ for neuter and /ɛn/ /n/, or /Ø/ for common gender, is used to spell out other morphosyntactic features, such as DEFINITENESS, which shows up as a suffixed article on nouns (for example *stol-en* (chair-DEF.C) ‘the chair’ vs. *bord-et* (table-DEF.N) ‘the table’), or on the prenominal determiner of APs, *den* vs. *det*. Crucially, formal gender on nouns does not have any inherent semantics.<sup>17</sup>

A semantic gender is not primarily related to a word, but to reference, either the reference of a noun phrase or reference conveyed by deictic means. When a speaker chooses to use a certain pronoun, s/he also decides how to categorize the referent in question.

---

<sup>16</sup> This idea has been developed in subsequent work, for example Dahl (1999) and Josefsson (2009), although the terminology might differ.

<sup>17</sup> In chapters 4 and 5, where so-called pancake sentences in Swedish and the gender system in some varieties of Danish are discussed, it will be shown that formal gender is in the process of semanticization in these varieties.

The most obvious semantic genders in the sense just described are MASCULINE and FEMININE, straightforwardly conveyed by the pronouns *han* ‘he’ and *hon* ‘she’. These pronouns can be used for anaphoric (including strictly deictic) reference, to evoke the notion of a male or a female referent; by using the pronouns *han* ‘he’ or *hon* ‘she’ a speaker imposes malehood or femalehood onto a referent – whether or not the intended referent is part of the previous linguistic discourse, and whether or not a noun in the previous linguistic discourse denotes a typical female or a male person.

In the core cases, *han* ‘he’ and *hon* ‘she’ are used to refer to humans, but these pronouns can also be used to make reference to animals that we ascribe human-like properties.<sup>18</sup> Consider (3.1):

- (3.1)     *Titta*     *på*     *hund-en.*     *Visst*     *är*     *han/hon söt!*  
          look.IMP   at   dog-DEF.C   surely   be.PRS   he/she   sweet.C  
          ‘Look at the dog! Isn’t he/she sweet?’

The choice of *han* ‘he’ in (3.1) reveals the knowledge and/or the attitude of the speaker as regards the referent in question; he/she views the dog as basically human, and knows/assumes the dog is a he-dog or a she-dog. Had the speaker chosen to use the pronoun *den* ‘it’ instead, it would presumably have been either because s/he does not know the sex of the dog or that this speaker thinks of dogs as basically thing-like creatures.

- (3.2)     *Titta*     *på*     *hund-en.*     *Visst*     *är*     *den söt!*  
          look.IMP   at   dog-DEF.C   surely   be.PRS   it.C   sweet.C  
          ‘Look at the dog! Isn’t it sweet?’

Note that the choice between the pronouns *han* ‘he’ in (3.1) and *den* (it.C) ‘it’ in (3.2) is not primarily due to any scientific or objective properties of the world, but to the way in which a speaker wishes to categorize a referent in the world of discourse or in a particular

---

<sup>18</sup> In the literature a distinction is often made between humans and animates. In my view it is difficult to make such a distinction, at least not for Swedish. To what extent people think of dogs, for instance – in terms of animates or inanimates – is probably individual and it may even differ from situation to situation. It is not clear that the question is relevant at all to linguistics. Dahl (1999) discusses at length a so-called *cut-off point*, i.e. a point on a scale where the line between humans/animates and inanimates goes. The cut-off point would be different for different languages. It is possible that such a distinction can be made for other languages, but for Swedish it does not seem applicable, or at least not possible to fix for the language as such.



communicative context.<sup>19</sup> Crucially, the use of *han* ‘he’ and *den* (it.C) ‘it’ is unrelated to the formal gender of the noun *hund* ‘dog’.

In (3.1) and (3.2) above *hund* ‘dog’ is the antecedent (or, as will be proposed later in this chapter, the antecedent-trigger) for the pronoun. Although slightly marginally, the pronoun *det* (it.N) ‘it’ can be used for this type of antecedent too. The context for (3.3) is a truck having run into a pack of dogs on a road.

(3.3)      *Hund?      Ja,    det    låg      utsmetat                      över hela      vägbanan.*  
                  dog(C)?    Yes, it.N   lie.PST   out.smear.PSTPTC    over   whole   road-DEF.C  
                  ‘Dog? Yes, it was smeared all over the road.’

The use of *det* in (3.3) indicates a ground reading of the antecedent; in other words, the meaning is ‘dog flesh’ (see “The Universal Grinder”, Pelletier 1975, 1991). The structure of a noun phrase with a ground reading, as in (3.3), will be discussed in detail in chapter 4.

---

<sup>19</sup> A problem is that it is not only our worldview that determines the choice of pronoun; the linguistic form itself might be influential in a more subtle way. For example, in Swedish there is a fairly strong tendency to “pronominalize” noun phrases such as *fluga* ‘fly’, *mygga* ‘mosquito’, and *skata* ‘magpie’ with *hon* ‘she’ and *skalbagge* ‘beetle’ and *hare* ‘hare’ as *han* ‘he’. This is probably due to formal properties of the nouns. Nouns such as *flicka* ‘girl’, *kvinna* ‘woman’, and *gumma* ‘old woman’, are all old (weak) feminine nouns, ending in *-a*, and *gubbe* ‘old man’, *kille* ‘boy, guy’, *pojke* ‘boy’, ending in *-e*, are old (weak) masculine nouns. Naturally there was a mapping principle in Old Swedish saying that a weak noun denoting a human/animate was formally feminine if it denoted a female, and it was formally masculine if it denoted a male (although there were exceptions, of course). There are minimal pairs in modern Swedish that reflect this principle, for instance *maka* ‘female spouse’ and *make* ‘male spouse’. Furthermore, there is a strong paradigmatic tendency that names ending in *-a* are female. Some of these name have a corresponding male name ending in *-e*:

(i) Female names	Masculine names
<i>Inga</i>	<i>Inge</i>
<i>Runa</i>	<i>Rune</i>
<i>Tora</i>	<i>Tore</i>
<i>Berta</i>	<i>Bert</i>
<i>Gustava</i>	<i>Gustav</i>

Many inanimate nouns belong to the old weak feminine and masculine declinations, for example *skola* ‘school’ and *penna* ‘pencil’, and *loge* ‘barn’ and *spade* ‘spade’. Nevertheless, an association between females and the *a*-ending of (old) weak feminines seems to be strong enough to promote the use of *hon* ‘she’ as an anaphoric pronoun (the corresponding holds for *han* ‘he’). As a consequence, the *a*-ending on *fluga* ‘fly’ is presumably the reason why a speaker thinks of this animal as female in some sense. The discussion illustrates that it is not only our conception of an animal that determines the choice of pronoun; the associations evoked by the formal properties of a noun may influence how we construe an animal, and hence promote the choice of a particular pronoun.

As we have seen, all four pronouns *han* ‘he’, *hon* ‘she’, *den* (it.C) ‘it’ and *det* (it.N) ‘it’ can be used to refer to the referent of a noun such as *hund* ‘dog’. Examples of this type challenge Hockett’s famous definition, cited in chapter 2, that genders are “classes of nouns reflected in the behavior of associated words” (Hockett 1958, 231; see also Corbett 1991). According to a strict application of Hockett’s definition, the word *hund* ‘dog’ would have to belong to four genders: *han*-gender, *hon*-gender, *den*-gender, and *det*-gender. A better explanation is to assume that nouns do not have inherent semantic genders. However, the fact that nouns may have prominent meaning components, such as #animate#, #male#, or #female#, is captured by the notion of lexical gender, as was discussed in chapter 1. The examples given so far seem to indicate that semantic gender is not determined by the lexical gender. Semantic gender is a way of categorizing the world that is independent of the lexical gender of a noun, although there is a prototypical mapping for some of the nouns.

### 3.2 Ref-pronouns and Syn-pronouns

A distinction that will be important in this chapter is the one between Ref-pronouns and Syn-pronouns. This terminology goes back to Bosch (1983, 1986).<sup>20</sup> Ref in stands for ‘Referential’ and Syn for ‘Syntactic’.

Let us first consider Syn-pronouns. The pronoun *det* (it.n) ‘it’ in (3.4) is an example of a pronoun used as a Syn-pronoun:

- (3.4) *Titta*      *på*      *lejon-et!*      *Det*      *är*      *vacker-t!*  
          look.IMP   at   lion-DEF.N   it.N   be.PRS   beautiful-N  
          ‘Look at the lion! It’s beautiful!’

The DP antecedent *lejonet* carries the formal features neuter and singular, which are shared by the pronoun *det*. In terms of reference, the pronoun *det* refers back to the noun phrase *lejonet*, and no features or semantic components are added. (The feature identity between *lejonet* and *det* is a good illustration of Bosch’s parallel between Syn-pronouns and agreement.)

An example of a Ref-pronoun is *det* in (3.5):

---

<sup>20</sup> Bosch uses the abbreviations S-pronouns and R-pronouns, a terminology that has become inappropriate due to the fact that the term R-pronoun nowadays is used for a different phenomenon.

- (3.5) *Pelle har snattat. Det var tråkigt-t.*  
 Pelle has shoplift.PSTPTC. it.N be.PST sad-N.  
 ‘Pelle has shoplifted. That’s sad.’  
 EVENT  
 Discourse Gestalt ← *det*  
 NEUTER

In (3.5) the pronoun *det* (it.N) ‘it’ evokes a non-linguistic referent, more precisely the notion of an event which corresponds to, or is motivated by, the propositional content of the preceding clause (“Pelle has shoplifted”). Given the assumption that a main clause has no formal features, an assumption that should not be very controversial, Syn-linking by way of formal gender or other features is not available in (3.5).

In what follows I will use the term Ref-linking for the relation that holds between a Ref-pronoun and its antecedent, and Syn-linking for the corresponding relation between a Syn-pronoun and its antecedent. When it comes to Ref-linking, Bosch (1983, 1986, 1988) and Cornish (1999) make no difference in principle if there is a linguistic context or not. This means that *det* (it.N) ‘it’ in a sentence such as *Det var tråkigt* ‘It was sad’, uttered as a comment on a scene where the speaker watches someone doing shoplifting, illustrates an instance of Ref-linking for the same reasons as *det* in (3.5). The reason is that the first sentence in (3.5) (‘Pelle has shoplifted’) is not the actual antecedent, whereas the noun phrase *lejonet* ‘the lion’ in (3.4) is. Rather, the propositional content of the first sentence in (3.5) identifies a discourse figure, which is, in fact, the same discourse figure as the referent for the pronoun *det* in the sentence that follows. This is, basically, the reason why Bosch prefers to use the term *antecedent-trigger*, in cases such as (3.5), not antecedent. In the following, my basic assumption will be that Ref-linking holds in all cases where Syn-linking does not hold.

In the present study a Syn-pronoun is defined as a pronoun that participates uniquely in Syn-linking, in other words a pronoun that does not add any feature that is not present in the antecedent. (This captures the intuition that Syn-pronouns are very much like agreement.) Consider (3.6):

- (3.6) *Titta på hund-en. Visst är han söt!*  
 look.IMP at dog- DEF.C. surely be.PRS he sweet  
 ‘Look at the dog! Isn’t he sweet!’

The noun *hunden* ‘the dog’ in (3.6) presumably carries the features COMMON GENDER and NUMBER (SINGULAR). The pronoun *han* ‘he’ carries the feature MASCULINE and NUMBER (SINGULAR). (The pronouns *han* ‘he’ and *hon* ‘she’ do not carry any formal gender feature; for arguments see below and Josefsson (2009).) Since the pronoun *han* ‘he’ superimposes a feature that is not present in the antecedent, namely MASCULINE, *han* is not a Syn-pronoun in this context, but a Ref-pronoun. Consequently, the link between *han* ‘he’ and *hunden* ‘the dog’ in (3.6) is not a link between two linguistic entities, a pronoun and noun (phrase); instead *han* ‘he’ links to the same discourse entity as *hunden* ‘the dog’. In other words, *hunden* is an antecedent-trigger in (3.6), too, not an antecedent.

In my view, a proper understanding of the term Ref-pronoun is imperative for a proper understanding of the true nature of pronouns in general. Bosch (1986) points out that the very term *pronominalization* is problematic. It is reminiscent of the early transformational grammar, when content in the D-structure was assumed to be substituted by a pronoun in the S-structure. Bosch refers to this conception as “substitutionalism” (p. 69). According to Bosch, it is such a view that underlies the classic work of Hockett (1958) and Bloomfield (1935): “In their [Hockett’s and Bloomfield’s] formulation pronouns are ‘substitutes’ for full linguistic forms” (p. 71). Substitutionalism, in association with the attempt to achieve a unified analysis of pronouns (cf. Tasmowski & Verluyten 1982, 1985), implies that for every (anaphoric) pronoun we will be able to find the linguistic element for which the pronoun is a substitution (a linguistic form that in fact would be present in the D-structure of the pronoun). According to Bosch, it would pose no problem to “fill in” the element that the pronoun substitutes, but the problem is that there would be many different antecedent candidates, and that different pronouns may be used to “pronominalize” a certain discourse element: “It is no art (or science) to look at the pronouns [...] and in each case think up some NP or noun that agrees with the pronoun in gender and number and would thus willingly yield to the role of the pronoun’s controlling ‘antecedent’. The question is how we get from identical overt antecedents to wildly different controlling antecedents” (Bosch 1986, 70).

Instead of trying to get at a uniform analysis of pronouns, Bosch shows that we need to make a distinction between Syn-pronouns and Ref-pronouns, as discussed above, which makes it possible to distinguish between those pronouns that share features (and in my view structure) with their antecedents, and those that do not. He also points out that the distinction between Syn-pronouns and Ref-pronouns is a difference in the referential status of pronoun

occurrences, not a distinction between pronominal forms. In other words, a certain pronominal form can be a Ref-pronoun in one occurrence and a Syn-pronoun in another.

When it comes to its function, a Syn-pronoun is similar to an agreement affix, such as third person singular *-s* on verbs in English. “There is no issue as to whether the third person *-s* in a sentence like *x leaps* refers to anybody or anything and if so to whom or what. Its function is to mark the fact that that leap is interpreted as a function that takes *x* as its argument, no matter what you fill in for ‘*x*’” (Bosch 1986, 66). Ref-pronouns are different; they “need a referent in order to be interpreted, just like any other referentially occurring NP. If, in a particular syntactic structure, this referent is introduced by means of another definite NP and the [Ref-pronoun] occurs co-referentially with that NP, then the interpretation of the [Ref-pronoun] depends on the reference of that NP” (Bosch 1986, 66).

To conclude: A Syn-pronoun takes a linguistic entity, typically a DP, as its antecedent. It adds nothing due to the features it carries, and from a semantic point of view it seems to function as an index that refers back to its antecedent DP. A Ref-pronoun may add or superimpose information about a referent that is already evoked by a previous DP, or evoke a new discourse referent, which is motivated either by the deixis of the speech situation or by the preceding linguistic context.

With this background, let us now take a look at the setup and properties of third person Ref-pronouns in Swedish.

### 3.3 Ref-pronouns

As should be evident by now, Ref-pronouns may be used with or without a linguistic context. Without a linguistic context their reference is determined by deixis. Let us start out by taking a look at the pronouns *han* ‘he’ and *hon* ‘she’ used with deictic reference:

- (3.7) *Titta han flyger, och hon flyger också!*  
look he fly.PRS, and she fly.PRS too  
‘Look, he’s flying, and she’s flying too!’

The context of (3.7) is an ongoing event; *han* refers to a male referent and *hon* to a female one. Although we cannot actually prove it (see the discussion about anaphoric pronouns above), the null hypothesis is that there is no underlying linguistic antecedent for *han* ‘he’ and *hon* ‘she’ in (3.7). The use and feature content of animate pronouns *han* ‘he’ and *hon* ‘she’ are

fairly uncomplicated. In modern Swedish they are used basically only for animate referents.<sup>21</sup>

Following the definition given above, *han* ‘he’ and *hon* ‘she’ are Ref-pronouns in contexts such as (3.8) too. The difference between the use of *hon* ‘she’ in (3.7) and (3.8) is that there is a linguistic context in (3.8) which makes the pronoun anaphoric. At this point it might be warranted to stress once more that the term anaphoric only means that it is the linguistic context that provides an antecedent-trigger, not that the noun/noun phrase IS the antecedent.

- (3.8) *Titta på doktor-n! Hon svimmar!*  
 look.IMP at doctor- DEF.C. she faint.PRS.  
 ‘Look at the doctor! She is fainting!’

The reason why *hon* ‘she’ is a Ref-pronoun in (3.8) and not a Syn-pronoun is that this pronoun adds a feature, FEMININE, which is part of the pronoun *hon* ‘she’, onto the discourse referent that is evoked by the noun phrase *doktorn* ‘the doctor’. This feature is not inherent in this noun. A background assumption is that nouns do not carry features such as FEMININE and MASCULINE; for arguments, see chapter 2. However, before proceeding, we also need to establish that the pronouns *han* ‘he’ and *hon* ‘she’ do not carry any formal gender feature, more specifically not a common gender feature, an assumption that goes against the traditional assumption. The argumentation goes as follows: A left dislocated DP has to agree in formal gender with a subject. In (3.9) the subjects are *den* (it.C) ‘it’ and *det* (it.N) ‘it’:

- (3.9) a *Den har gått sönder, buss+jävel-n/\*buss-helvete-t.*  
 it.C has gone broken, bus+devil-DEF.C/bus-hell-DEF.N  
 ‘It’s broken, the damned bus.’  
 b *Det har gått sönder, \*buss+jävel-n/ buss-helvete-t.*  
 it.N has gone broken, \*bus+devil-DEF.C/ bus-hell-DEF.N  
 ‘It’s broken, the damned bus.’

If the subjects are *han* ‘he’ or *hon* ‘she’, no agreement in formal gender with the dislocated DP is required:

- (3.10) a *Han försvann med pengarna, det svin-et/*  
 he disappear.PST with money.DEF.PL, that.N swine-DEF.N/  
*den idiot-en.*

---

<sup>21</sup> The only exceptions seem to be *klockan* ‘the clock, the time’, *människan* ‘man, mankind’. In my view, the examples are idiosyncratic exceptions that do not have to be comprised in an account of gender in contemporary Swedish.

that.C idiot-DEF.C  
 ‘He disappeared with the money, that bastard.’

- b    *Hon försvann med pengarna, det svin-et/*  
       she disappear.PST with money.DEF.PL    that.N    swine-DEF.N/  
  
       *den idiot-en.*  
       that.C    idiot-DEF.C  
       ‘She disappeared with the money, that bastard.’

No ungrammaticality arises with a dislocated noun phrase of either formal gender in (3.10), which indicates that *han* ‘he’ and *hon* ‘she’ lack a formal gender feature.

To conclude so far: *hon* ‘she’ and *han* ‘he’ are Ref-pronouns, which superimpose a feature related to sexus or natural gender on the discourse referent to which the anaphor refers. Furthermore, *han* ‘he’ and *hon* ‘she’ lack a formal gender feature. Let us now take a closer look at *den* (it.C) ‘it’ and *det* (it.N) ‘it’ when used as Ref-pronouns. In other words, what is the meaning of *den* and *det*, when used without linguistic antecedents? A native speaker of Swedish has clear intuitions as how to use the pronouns, but to explain exactly where the difference lies seems quite difficult.

As Bosch (1983, 1986, 1988) and Cornish (1986) point out – and as should be obvious from the discussion so far in this chapter – what is crucial for the distinction between Ref-pronouns and Syn-pronouns is not the presence or the absence of a linguistic context, but whether or not a pronoun takes a linguistic entity (typically a DP) as its antecedent. This means that *det* (it.n) ‘it’ in (3.11) below is a Ref-pronoun.

- (3.11) *Bo ljuger. Det är hemsk-t!*  
       Bo lie.PRS.    it.N    be.PRS    terrible-N  
       ‘Bo is lying. It’s terrible!’

The reason why *det* in (3.11) above is a Ref-pronoun is that the antecedent is not the preceding clause as such, but the propositional content of the clause – a main clause presumably lacks features such as formal gender and number, which would be copied if *det* in (3.11) was a Syn-pronoun. The same applies to the example in (3.6); *hunden* ‘the dog’ is the antecedent trigger for *han* ‘he’, not the antecedent proper.

Now consider (3.12); the context is a zoo where a child is pointing at an unfamiliar animal. A relevant comment would be the following. (Note that the noun *djur* ‘animal’ is neuter.)<sup>22</sup>

- (3.12) *Titta, den sover!*  
 look, it.C sleep.PRS  
 ‘Look, it sleeps!’

In this context, *den* is strictly deictic. Also *det* (it.N) ‘it’ can be used in a strictly deictic way. Compare (3.13a) to (3.13b). The context is A and B looking at a spot in the garden where there is a newly planted tree. (*Träd* ‘tree’ is neuter in Swedish.)

- (3.13) a *Den var vacker!*  
 it.C be.PST beautiful.C  
 ‘It’s beautiful!’  
 b *Det var vacker-t!*  
 it.N was beautiful-N  
 ‘It’s beautiful!’

Given the context, both (3.13a) and (3.13b) are relevant linguistic reactions, but the two alternatives convey different meanings. One could of course imagine that *den* in (3.13a) has a silent linguistic antecedent, for instance the common gender noun *plantan* ‘the plant’, but, as pointed out above, such a solution is problematic in many ways; the null hypothesis is that there is no linguistic antecedent at all, in other words that the reference is strictly deictic. The intended referent will have to involve ‘the tree’, though. Likewise, *det* in (3.13b) could also be imagined to have a silent linguistic antecedent, for instance the neuter gender noun *trädet* ‘the tree’, but it could also refer to the whole scenery or setting, in which case the reference would be strictly deictic. Before going into a more detailed discussion about how the differences in meaning arise, depending on the choices between *den* or *det*, let us consider two more parallel examples:

- (3.14) a [A person stands in front of a desk full of exotic fruit, nuts etc.]  
 Seller, with a strange, probably edible “thing” in his hand:  
 – *Nå?*

---

<sup>22</sup> According to Dahl (1999, 111), there is a tendency in contemporary Swedish to use common gender *den* ‘it’ when reference is made to “singular instances of concrete, countable, inanimate objects (e.g., pieces of furniture, instruments, etc.).” This would hold true “even if the nouns used to refer to these objects are ‘Neuter’ and according to normative grammar, the ‘Neuter’ pronoun *det* should be used.” The extent to what extent Dahl is right in his conclusion, and, in that case, if it relates to an ongoing language change, remains to be investigated.



Well  
 ‘Well?’  
 Buyer:  
 – *Jag tar den.*  
 I take.PRS it.C  
 ‘I’ll take it.’

b [A and B standing in front of the freshly painted boat]:

A:  
 – *Vad tycks?*  
 what think.PRS.PASS  
 ‘What do you think?’

B1:  
 – *Det var snygg-t!*  
 it.N be.PST beautiful-N  
 ‘It was nice.’

B2  
 – *Den var snygg!*  
 it.C be.PST beautiful.C  
 ‘It was nice.’

What the examples in (3.13) and (3.14) show is that *den*, used as a deictic pronoun, refers to an entity that has thing-like properties, whereas *det* is used in other cases. An important question is then of course what it means to have “thing-like properties”. Josefsson (2009) proposes that the difference between deictic *den* and *det*, as in the examples in (3.14) and (3.15), relates to countability. Intuitively speaking, *den*, used as a deictic pronoun, refers to objects that can be counted, in the sense of having spatial boundaries which make it possible to separate them from other objects, and the background, and, consequently, to count them. The referent of *det* lacks such properties, and is used to refer to substances, events (including states), properties, etc. It should be emphasized that countability and non-countability is not a direct reflection of properties of the “true world”, but rather properties that we assign or ascribe to elements in the world of discourse, how we choose to think of the world or to present the world to our interlocutors. In other words, B2’s response in (3.14b) makes reference to the boat, whereas B1’s response makes reference to something else, the whole scene or the result, the setting or the like.

As a first approximation, we conclude that countability, hence “objecthood”, is related directly to the neuter–common gender distinction, for instance that the meaning of common gender is bounded/countable and the meaning of neuter unbounded/uncountable. However, a more reasonable assumption is to explain the difference described between *den* and *det* in

(3.13) and (3.14) by making use of another feature, namely number. In doing so, I will draw on Borer (2005), who suggests that the count/mass distinction is hosted in a functional projection that she calls a DivP. According to Borer, this is also the projection that hosts number marking. The idea that I launch is that the pronoun *den* carries the morphological feature number, specified as singular, whereas *det* lacks a number feature altogether. An argument that this is on the right track is that the coordination of *den* and *den*: *den och den* (it.C and it.C) ‘it and it’ is normally doubled by *de* (it.PL) ‘they’; this is not possible for *det och det* (it.N and it.N) ‘it and it’, which has to be doubled by *det*:<sup>23</sup> In both (3.15a) and (3.15b) the context is a person listing things that come up in his/her head. Another possible context is a person standing in a garden, nodding at relevant parts of the scenery in front of her.

- (3.15) a *Den och den, de är snygg-a.*  
           it.C and it.C, they are nice-PL  
           ‘That one, and that one, they are nice.’
- b *Det och det, det är snygg-t.*  
           it.N and it.N, it.N be.PRS nice-N  
           ‘That and that, that’s nice.’

The underlying assumption is that *de* ‘they’ refers to a set of individual elements each of which has to be countable. In (3.15a) the coordination of entities results in a set consisting of more than one entity. In (3.15b) the coordination does not result in a set of entities but a larger mass or collective.

If the proposed analysis is on the right track, the presence vs. absence of number morphology is what accounts for the difference in meaning between (16a) and (16b), as well as *den* and *det* in (3.13) and (3.14). The pronoun *den* expresses the features DEFINITENESS, SINGULAR, and COMMON GENDER, and *det* only DEFINITENESS and NEUTER. Since singular does not correspond to a particular piece of morphology that would mark the difference between NUMBER, SINGULAR, and no NUMBER at all, another morphological category would stand-in to mark this meaningful distinction, namely formal gender feature.

---

<sup>23</sup> One might expect that *den och den* (it.C and it.C) would trigger agreement in the plural, but for some reason this does not yield an entirely well formed result:

- (i) ??*Den och den är snygg-a.*  
       it.C and it.C be.PRS nice-PL
- (ii) *Det och det är snygg-t.*  
       it.N and it.N be.PRS nice-NEUT.

The proposed analysis is parallel to the ideas proposed in chapter 2: formal gender on nouns was assumed not to have any meaning *per se*, but used to spell out two semantically meaningful categories, definiteness, for example *tiger-n* (tiger- DEF.C) ‘the tiger’ vs. *lejon-et* (lion-DEF.N) ‘the lion’), and indefiniteness, for example *en tiger* (INDF.C tiger) ‘a tiger’ vs. *ett lejon* (INDF.N lion) ‘a lion’. In the case of the Ref-pronouns *den* and *det*, COMMON GENDER is used to spell out another meaning-carrying category, NUMBER SINGULAR.

According to the proposed analysis, neither *den* nor *det* would carry any negatively specified features. However, such an interpretation can be conveyed by implicature. The fact that a speaker chooses to use *det* (that is, a pronoun that lacks a number feature), instead of *den*, means that s/he does not wish to impose countability onto the discourse element. (As pointed out above, whether or not this holds true in the “real world” is not interesting.) In a parallel fashion, the pronoun *den* is not specified as -ANIMATE, but such a meaning may be conveyed, especially in certain contexts, by implicature. A speaker who chooses to use *den* instead of *han* ‘he’ or *hon* ‘she’ for a human referent either implies that the s/he does not know the sex of the referent or that s/he views the referent as neither male nor female, in other words that a specification of sex is irrelevant or not possible (in the speech situation). This discussion is relevant when it comes to a language change that has taken place during the last few decades in Swedish. Until around 2000 the pronoun *han* ‘he’ was a default pronoun, used for animate referents where the natural sex was irrelevant or unknown (for instance in law texts). This use of *han* ‘he’ has decreased considerably. The reason is not primarily linguistic, it ultimately has a socio-political explanation; to use *han* ‘he’ as the default pronoun for animates has become politically incorrect.<sup>24</sup> The increased use of *den* instead does not imply a change in the feature setup of *den*, but a loosened implicature. The pronoun *den* was in principle available before, for reference to animates, but the use of *den* instead of *han* implied that the referent was not animate. Thus, *han* had two meanings, animate and male. The combination of these two features could have survived, but the relation between the two was interpreted as an implication animate → male, which has become politically impossible. So *han* lost one of

---

<sup>24</sup> Using *den* for animates has indeed become more frequent during the last few decades. The *Swedish Academy Grammar* (Teleman & al. 1999 part 2: 227) recommends that *han* ‘he’ be used as the default pronoun for human reference. Even though it is comparatively rare, *den* was used for reference to humans in older Swedish too. One example from 1747 is provided in the Swedish Academy Dictionary (SAOB): *At han ville beskydda hennes son Xipharés, om den råkade i Romerska händer* ‘that he wanted to protect her son Xipharés, if *den* fell in Roman hands’. Dalin, Olof von. *Svea rikes historia*. 1:46. Stockholm 1747.

its meaning alternatives, animate, and only the meaning male was retained. In this situation a less specified pronoun, *den*, expanded its use.

In this section the Ref-pronouns *han* ‘he’, *hon* ‘she’, *den* (it.C) ‘it’, and *det* (it.N) ‘it’ have been discussed. It is important to keep in mind Bosch’s point, that the difference between Ref-pronouns and Syn-pronouns is not a matter of pronominal form, but a “difference in referential status of pronoun occurrences” (Bosch 1986, 66). As we shall see below, *den* and *det* may be used as Syn-pronouns too.

### 3.4 Semantic genders expressed by personal pronouns

#### – a systematic account

The main point of section 3.3 was that Swedish has four semantic genders, corresponding to the four third person Ref-pronouns *han* ‘he’, *hon* ‘she’, *den* (it.C) ‘countable it’, and *det* (it.N) ‘non-countable it’, the latter not carrying any feature specification apart from definiteness.<sup>25</sup> However, the meaning associated with these four pronouns arises due to different mechanisms. The meaning of *han* ‘he’ and *hon* ‘she’ is fairly straightforward; the pronouns are assumed to have a respective morphological feature specifications MASCULINE and FEMININE. By using these pronouns, a speaker superimposes either of the semantic features on a referent in the world of discourse. The assumption that these pronouns also carry the feature NUMBER, SINGULAR means that the use of *han* ‘he’ and *hon* ‘she’ also imposes countability on the referent in question, a conclusion that should not be controversial. If a speaker chooses to use the pronoun *den* (it.C) ‘it’ for a referent, the meaning ‘inanimate’ is not conveyed by virtue of a corresponding morphosyntactic feature, but by implicature. The pronouns *han* ‘he’ or *hon* ‘she’ are deselected, so to speak, and in contexts where *han* ‘he’ or *hon* ‘she’ could have been a possibility, the choice of *den* (it.C) ‘it’ or *det* (it.N) ‘it’ usually conveys the meaning ‘not animate’, by means of implicature. Note that this holds only in contexts, where the speaker is assumed to have a possibility to choose between *han* ‘he’ and *hon* ‘she’. In contexts where a speaker lacks such a possibility, for instance is ignorant of the natural gender of a human referent, *den* may be chosen, without the meaning ‘inanimate’ thereby being

---

<sup>25</sup> The meaning of non-deictic *det*, that is, *det* without any demonstrative or deictic force, is not very easy to pinpoint. The minimal meaning component is probably just ‘what I (the speaker) think about’.

imposed.<sup>26</sup> From a functional point of view the pronoun *det* (it.N) ‘it’ is used in contexts where neither *han* ‘he’, *hon* ‘she’, nor *den* (it.C) ‘it’ are natural choices. In this sense *det* is a default pronoun, sometimes with a very vague reference.

It is possible that the lack of features other than DEFINITENESS is what makes the pronoun *det* useful as an expletive subject, but this would be a separate question that will not be pursued in this study.

### 3.5 Syn-pronouns

A consequence of the idea proposed above is that *han* ‘he’ and *hon* ‘she’ are not possible to use as Syn-pronouns (in modern Swedish). The reason is that they lack a formal gender feature and also that common nouns lack morphosyntactic features such as MASCULINE or FEMININE (see chapter 2, this volume, for arguments). This leaves us with only two Syn-pronouns that are not in the plural: *den* (it.C) ‘it’ and *det* (it.N) ‘it’. These pronouns refer back to linguistic entities, in the typical case to DPs:

- (3.16) a *Titta på tiger-n. Den sover!*  
 look.IMP at tiger-DEF.C. it.C sleep.PRS  
 ‘Look at the tiger! It is sleeping!’
- b *Titta på lejon-et. Det sover!*  
 look.IMP at lion-DEF.N. it.N sleep.PRS  
 ‘Look at the lion! It is sleeping!’

As expected, *den* (it.C) ‘it’ and *det* (it.N) ‘it’ in the examples above can be replaced with the Ref-pronouns *han* ‘he’ and *hon* ‘she’:

- (3.17) a *Titta på tiger-n. Han/hon sover!*  
 look.IMP at tiger-DEF.C. he/she sleep.PRS  
 ‘Look at the tiger! He/she is sleeping!’
- b *Titta på lejon-et. Han/hon sover!*  
 look-IMP at lion- DEF.N. he/she sleep.PRS  
 Look at the lion! He/she is sleeping!’

However, *den* and *det* are not mutually interchangeable:

---

<sup>26</sup> As we shall see below, there are attempts to introduce a new, politically correct, sex-neutral, pronoun, *hen*, with the meaning HUMAN in Swedish.

- (3.18) a *Titta på tiger-n. \*Det sover!*  
 look.IMP at tiger-DEF.C. it.N sleep.PRS  
 ‘Look at the tiger! It is sleeping!’
- b *Titta på lejon-et. ?\*Den sover!*  
 look-IMP at lion-DEF.N. it.C sleep.PRS  
 ‘Look at the lion! It is sleeping!’

It should be pointed out that (3.18a) is worse than (3.18b). This might have to do with the fact that the pronoun *den* might have a derogative flavor (in the past more than today). Similarly, when a speaker knows the natural gender of a person, but chooses to use the pronoun *den*, it might be conceived of as depreciating. However to use *det* for a human is close to an insult.<sup>27</sup>

We shall return to the question of the rules governing the choice of pronoun in different contexts in section 3.7, but a conclusion this far is that *den* (it.C) ‘it’ and *det* (it.N) ‘it’ have to be construed as Syn-pronouns if there is a possible antecedent in the discourse.<sup>28</sup>

### 3.6 Syn-pronouns and Ref-pronouns – from point of view of the pronouns

Until now Ref-pronouns and Syn-pronouns have been treated as two partly homonymous but different sets of pronouns. In this section we will take another perspective, and take a look at the formal and semantic gender system from the point of view of the pronouns, i.e. the phonological forms. With this perspective there is but one set of personal pronouns; the availability of discourse antecedents, as well as the pragmatic situation will determine their meaning and their status as Syn-pronouns and Ref-pronouns. Consider Table 1, showing Ref-pronouns and Syn-pronouns in the non-plural.

Ref-pronoun: meaning		Syn-pronoun: function
male countable referent in the discourse	<i>han</i>	–
female countable referent in the	<i>hon</i>	–

<sup>27</sup> The derogatory flavor of *det* is noted in Tegnér (1925 [1964], 39).

<sup>28</sup> In my view, the principle stating that *den* (it.C) ‘it’ and *det* (it.N) ‘it’ have to be construed as Syn-pronouns in contexts where this is possible holds in contemporary Swedish, but see Dahl (2000, 111) (see note 7 above) for a slightly different view. In chapter 5 the gender system in Danish in general and Jutlandic in particular is discussed; one of the main features of the ongoing change in Danish, when it comes to gender, is that this principle is in the process of being lost.

discourse		
Countable element in the discourse	<i>den</i>	Syn-linking to a nominal linguistic discourse antecedent, typically a DP
Element in the discourse	<i>det</i>	Syn-linking to a nominal linguistic discourse antecedent, typically a DP

Table 3.1. Pronominal forms and their use in modern Swedish.

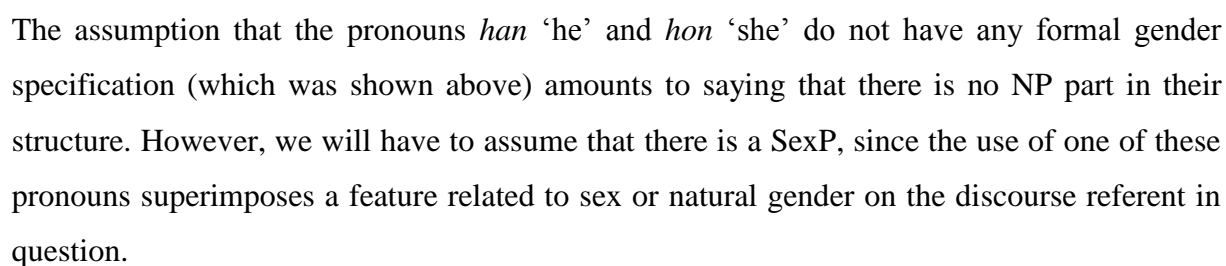
What Table 1 shows is that we do not have to assume that there are two different setups of Vocabulary Items, when it comes to personal pronoun. As we shall see below, the structure of *den* and *det* is the same, too, regardless of its use as a Ref-pronoun or a Syn-pronoun. (In modern Swedish *han* ‘he’ and *hon* ‘she’ can only be used as Ref-pronouns, so the question of possible different structures does not arise.)

When *den* (it.C) ‘it’ is used in a context with a potential linguistic anaphor, it is a Syn-pronoun, which means that a link is established between the antecedent (typically a DP) and the pronoun, by virtue of the number and formal gender feature. When *den* (it.C) ‘it’ is used as a Ref-pronoun, the common gender feature has a different function: it indicates the presence of the feature singular, which corresponds to the meaning, countable. From another perspective, countable means ‘bounded’; the notion of boundedness in space is a prerequisite for countability.

In a similar way, when *det* (it.N) ‘it’ is used in a context with a potential linguistic antecedent, typically a DP with a neuter head noun, a link is established between the antecedent and the pronoun by virtue of the formal gender. Whether the antecedent is a DP with or without number is irrelevant; what is important is that the pronoun *det* (it.N) ‘it’ does not have any feature that the antecedent lacks – no semantic features are imposed. When *det* (it.N) ‘it’ is used as a Ref-pronoun, the neuter feature indicates the absence of a number feature, which, in turn, means that referent is not ascribed countability. (Whether or not this is true in the “objective” world is not relevant.)

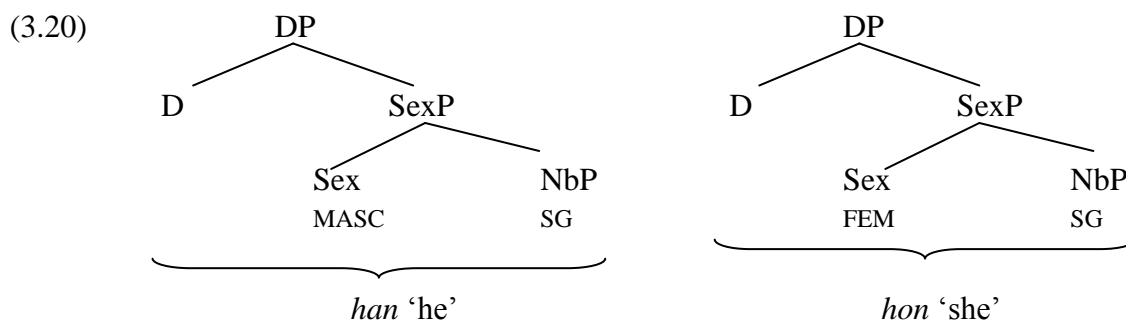
What we have seen is that one and the same feature, formal gender, can have different functions in the interpretation of a pronoun, depending on the nature of the antecedent, whether it is a linguistic antecedent or a non-linguistic one. With a linguistic antecedent, typically a DP, formal gender creates a link between the pronoun and the DP antecedent. With a non-linguistic antecedent, formal gender conveys a countable or non-countable

Let us now take a look at the structure of the pronouns *han* ‘he’, *hon* ‘she’, *den* (it.C) ‘it’, and *det* (it.N) ‘it’. In Swedish the Syn-pronouns *den* and *det* display a close similarity to the suffixed articles, for example *stol-en* ‘the chair’ and *bord-et* ‘the table’. There is a close relationship between the (prenominal) article in other languages too, for example German *der Mann* – *er*, *die Frau* – *sie*, and *das Kind* – *es* in German. If the function of Syn-pronouns is to make visible the link between a linguistic antecedent (in the typical case a DP) and a pronoun in the sentence that follows, this is hardly unexpected. In view of this, it is natural to analyze *den* and *det* as corresponding to definite nouns, stripped of root phonology. What is left is the phonology of the formal gender. Consider the tree structures *den* (it.C) ‘it’ and *katt-en* (cat-DEF.C.) ‘the cat’ below:<sup>29</sup>



48





To what extent it is possible to associate different parts of the pronoun with different meanings/functional projections, for example the *h*-part of *han* 'he' and *hon* 'she' with the D-level is not crucial to the points I make; the spell-out of the structures in (3.20) is either *han* or *hon*, depending on the value of the Sex head.<sup>30</sup>

### 3.7 The choice of pronouns

As we have seen, a speaker sometimes has a choice as to what pronoun to use. The question is what restrictions or principles govern this choice. Is there for instance a rule stating that one type of pronoun should be preferred over the other? Are Ref-pronouns “better” than Syn-pronouns, or vice versa?

I propose that there are three principles that govern the choice between the pronouns *han*, *hon*, *den*, and *det*. First of all, Ref-pronouns are generally preferred over Syn-pronouns. Secondly, cross-sentential “disagreement” should be avoided. It should be stressed that these principles are functional, and that they are most probably subject to language-specific variation. The third principle is a version of the gricean criterion of relevance: “Be specific.”

The first principle above states that Ref-pronouns should be used if possible. This is, in fact, why the pronouns *hon* 'she' and *han* 'he' are preferred in contexts such as (3.21), not the Syn-pronoun *det* (it.N) 'it'.

- (3.21) a *Jag pratade med biträdet i affären. Han var klädd*  
           I talk.PST to clerk.DEF.N in shop.DEF.C. he was dress.PSTPTC  
           *i rött. \*#Det var klätt i rött.*

<sup>30</sup> An alternative would be to assume that there would be an Animate Phrase in (3.20) too, and that /h/ in *han* 'he' and *hon* 'she' would correspond to this feature, and that /a/ in *han* and /u/ in *hon* would correspond to MASCULINE and FEMININE, respectively.

in red.N. it.N was dress.PSTPTC.N in red.N  
 ‘I talked to the clerk in the shop. He was dressed in red. \*#It was dressed in red.’

b *Jag pratade med kvinna-n. Hon log. \*#Den log.*  
 I talk.PST to woman.DEF.N. She smile.PST. it.C smile.PST  
 ‘I talked to the woman. She smiled. \*#It smiled.’

In (3.21a) the feature MASCULINE is imposed on the discourse referent in question, which works well, from a pragmatic point of view. Since this is a possible alternative, the use of the Syn-pronoun *det* is strongly dispreferred, as pointed out above, not because it carries the feature INANIMATE, but because a more specific pronoun is available, given the pragmatics of the situation. Also note that no disagreement arises, due to the use of *han* ‘he’ in (3.21a), since this pronoun is not assumed to carry any feature corresponding to a formal gender. In (3.21b) the Ref-pronoun *hon* ‘she’ is preferred over the Syn-pronoun *den* (it.C), which, if it was chosen instead, would make reference back to the noun phrase *kvinnan* (woman.DEF.C.) ‘the woman’.

The second principle, the one that states that cross-sentential disagreement should be avoided, rules out examples such as (3.22):

(3.22) *Titta på lejonet. ?\*Den sover!*  
 look.IMP at lion.DEF.N it.C sleeps  
 ‘Look at the lion! It is sleeping!’

The reason why (3.22) is out is that the linguistic antecedent *lejonet* ‘the lion’ is a neuter noun phrase, whereas the pronoun *den* is common gender. The use of this pronoun would give rise to disagreement, hence the ungrammaticality.<sup>31</sup> This principle is probably language-specific too, and subject to an ongoing change in Swedish and Danish, see note 7, this chapter.

Now consider (3.23), where the natural gender of the referent is not known:

(3.23) a *Vi söker ett biträde. ?Det ska sälja skor.*  
 we search INDF.N clerk. it.N will sell shoes  
 ‘We are looking for a clerk. He/she will sell shoes.’

b *Titta på cyklist-en, som den kör!*

<sup>31</sup> For instance, according to Sigurdsson (2009, 30) there seems to be a “rather general preference for the formal gender to control pronominal reference in Icelandic”; this indicates that a restriction against “disagreement” is language-specific.

look.IMP at cyclist-DEF.C as it.C drive.PRS  
 ‘Look at the cyclist, the way he/she is cycling!’

The use of *det* (it.N) ‘it’ in (3.23a) and (3.23b) is not ungrammatical or unpragmatic. The extent to which Syn-pronouns are good choices seems to vary between languages, and is possibly also the subject of diachronic change.

The next question concerns cases when Ref-pronouns are not possible. Consider (3.24):

(3.24) *Jag köpte en bil. #Han var röd. Den var röd. #Det var rött*  
 I buy.PST INDF.C car. he was red. it.C was red.C. it.N was red.N  
 ‘I bought a car. #He was red. It was read. It was read.’

The use of *han* in (3.24) is out because it would impose “malehood” on an entity that we (normally) consider to be inanimate, which is pragmatically odd. (The use of *hon* ‘she’ would be out for the same reason.) Using *den* is fine, since it would link to common gender DP *en bil* by virtue of the common gender feature and the number feature. In my view, using *det* is out since there is another pronoun, *den*, which would convey reference to exactly the same element as the DP *en bil* ‘a car’, in the previous sentence. The inference would be that the use of *det* in (3.24) would convey reference to something else, something that would be related to the only available discourse referent, but not identical to it. Moreover, the predicate *röd* ‘red’ narrows down the number of possible discourse referents to physical entities that can have a color, and the only element in the discourse that fulfills this criterion is ‘the car’.

The fact that the neuter *det* is ungrammatical (if *bilen* ‘the car’ in the previous sentence is taken to be the discourse antecedent), indicates that *den* in (3.24) is a Syn-pronoun.

The discussion about the principles for the use of personal pronouns will continued in chapters 4 and 5. The idea to be proposed there is that the ongoing change in the Danish gender system is due to a growing weight on principle 1 and a corresponding laxation of principle 2 above.

### 3.8 Indefinite pronouns

There are a number of pronouns where the common gender–neuter distinction corresponds to differences in the semantics. Before going into details, a distinction has to be made between

independent and modifying pronouns. Only independent pronouns will be relevant in the following. Consider (3.25):

- (3.25) *Vi letade efter ett biträde i affären, men vi hittade inget.*  
 we look.PST after INDF.N clerk in shop.DEF.C, but we find.PST no.N  
 ‘We looked for a clerk in the shop, but we didn’t find any.’

In examples such as (3.25), I assume that the head noun *biträde* ‘clerk’ is present in the derivation in the second clause, but deleted in the phonology. In this case, *inget* (no.N) ‘no’ is a modifying pronoun:

- (3.26) *men vi hittade inget biträde.*  
 but we found no.N clerk(N)

In other contexts no identifying nominal is present in the context:

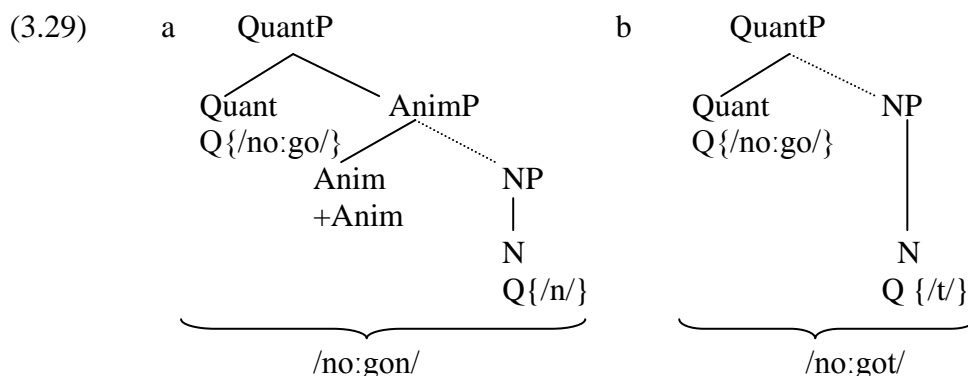
- (3.27) a. *Vi såg inget.*  
 we saw NO.N.  
 ‘We didn’t see anything.’  
 b. *Vi såg ingen.*  
 we saw NO.C  
 ‘We didn’t see anybody.’

As the translation indicates, the meaning of the independent pronoun *ingen* (no.C) is ‘no person’, whereas the neuter *inget* (no.N) means ‘nothing’. This means that in this case the distinction in formal gender corresponds to the animate–inanimate distinction. A corresponding pair is *någon* ‘someone’–*något* ‘something’:

- (3.28) a. *Vi såg något.*  
 we saw some.N.  
 ‘We saw something.’  
 b. *Vi såg någon.*  
 we saw some.C  
 ‘We saw somebody.’

Again we find that the common gender vs. neuter distinction corresponds semantically to the ANIMATE–INANIMATE distinction. I argued above that common gender on nouns does not carry any semantically relevant features, such as ANIMATE/INANIMATE or MALE/FEMALE. However, such features can apparently be the property of gender on pronouns. Technically, the pronouns *ingen/inget* and *något/någon* in (3.27) and (3.28) are Ref-pronouns (there is no linguistic antecedent), which may impose the semantic features in question on their discourse

antecedents. If the meaning components in question make up part of the meaning of the pronouns, they correspond to a functional projection, an AnimP. As proposed for *den* (it.C) ‘it’ and *det* (it.N) ‘it’ above, I assume that the locus of the formal gender is the NP layer. Hence, the structure of *någon* ‘someone’ and *något* ‘something’ is as shown in (3.29a) and (3.29b) below. Note that there is no -ANIMATE feature in (3.29b).



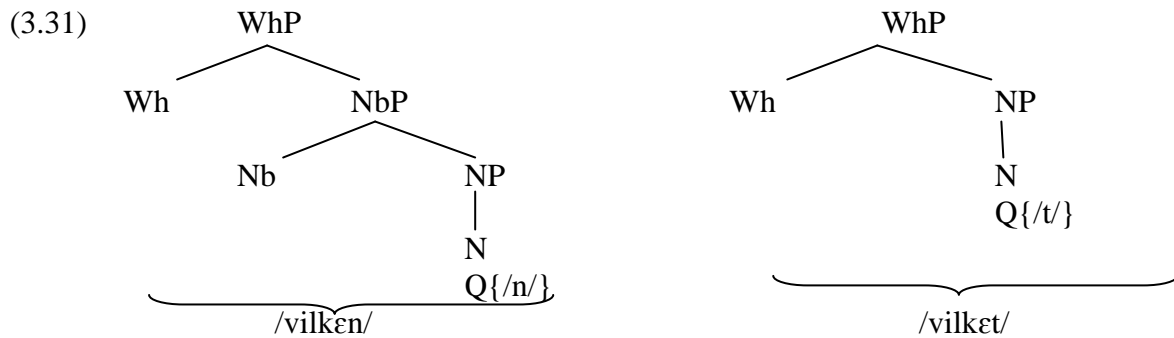
The trees in (3.29) may well contain more functional projections (for instance an NbP) for *någon* ‘someone’. The important point is that the difference in semantics is due to a difference in feature setup, which correlates to the formal gender distinction. Again we find that formal gender is used to express a semantically relevant category. The examples just discuss underline the idea that formal gender – neuter vs. common gender – does not have any inherent meaning as such.

There is a similar but slightly different distinction between *vilken* and *vilket*:

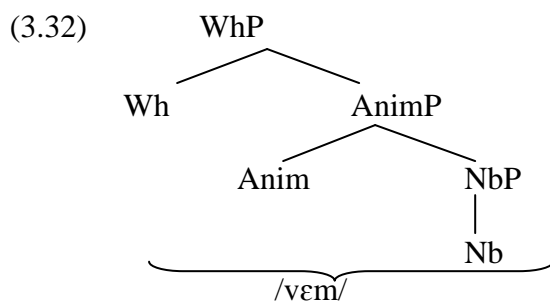
- (3.30)
- a *Vilken saknas?*  
 WH.C lack.PRS  
 ‘Who/what is missing?’

b *Vilket saknas?*  
 WH.N lack.PRS  
 ‘What’s missing?’

The *wh*-word *vilken* means roughly ‘which one’, whereas *vilket* cannot refer to an individual entity or a person, but has to make reference to a non-countable entity. (Again, we have to assume that there is no deleted head noun present in the derivation.) We thus find that *vilken*, when independently used, is a *wh*-word that corresponds to the Ref-pronoun *den* (it.C) ‘it’, as proposed above, whereas *vilket* corresponds to *det* (it.N) ‘it’. Consequently, I propose that the crucial meaning distinction between *vilken* and *vilket* is the presence vs. absence of a number phrase:



The corresponding pronoun for animates is *vem* ‘who’. I assume that this pronoun has an AnimP in its derivation, but crucially no NP:



The wh-word *vilken* can, though slightly marginally, refer to a human, about to the same degree as *den* (it.C). Within the analysis proposed here this is because there is no negatively specified meaning, such as ‘inanimate’ or ‘non-human’, associated with these two pronouns. What gives *vilken* this interpretation as a default option is that there is a positively specified pronoun, *vem* ‘who’. If *vem* is not chosen, the interpretation is that the feature ‘animate’ is deselected. And, as pointed out above, the inference of such a choice is that the referent is inanimate.

It is possible that other pairs of pronouns could be analyzed in the same way, but the examples discussed above illustrate the basic idea: formal gender in Swedish does not have any meaning *per se*, but it can be used to distinguish meanings conveyed by other morphological features. There are several meaning distinctions that can be conveyed by formal gender; the presence vs. absence of number, which corresponds to a countable vs. non-countable reading, and the distinction ‘animate’ vs. ‘non-animate’. To this list we may add the features definite and indefinite, which was shown in chapter 2.

### 3.9 Semantic gender and lexical gender

In chapter 1, a distinction was made between semantic gender and lexical gender. Lexical gender was assumed to be a salient meaning component associated with a noun, for instance ‘male’ or ‘female’ in some nouns, for example *king* and *queen*. Semantic gender was described as a category of thought, conveyed by pronominal resources. Consequently, a referent in the world of discourse is assigned a semantic gender by virtue of a speaker’s choice of pronoun. However, there is a close relation between, for example, the pronoun *hon* ‘she’ and the salient meaning component/lexical gender ‘female’. The question is how to describe this relation.

A noun is associated with a number of meaning components, which probably are best described as a structured system (see for instance Pustejovsky’s notion of *qualia structure*, Pustejovsky 1995). However, meaning components associated with nouns, for instance ‘male’, in association with the noun *king* could be thought of as *weak meaning*, in the sense that such components are usually negotiable and can be demoted to a higher or lower degree. For instance, a meaning component can be subject to metaphoric extension, which explains the meaning of a word such as *kungs+vatten* (king+water) ‘hydrochloric acid’ – this acid is the most powerful one since it can dissolve gold. A word such as *kungs+sång* (king+song) ‘anthem to the king’ could presumably be used also in cases where the regent is a queen. Similar examples are easily found. The meaning of a pronoun such as *hon* ‘she’, on the other hand, does not have any elaborate *qualia structure*; it expresses only a few meaning components, but these are, on the other hand, not negotiable. In other words, pronouns have a *strong meaning*. This is, in effect, why (3.33a) below (corresponding to example (2.29) in chapter 2) is pragmatically ill formed, whereas (3.33b) is ungrammatical.

- (3.33)     a   *Jag   träffade   kung-en.   #Hon   var   glad.*  
               I     meet.PST   king-DEF.C.   she     be.PST   happy.
- b   *Jag   träffade   honom.   \*Hon   var   glad.*  
               I     meet.PST   him.     She     be.PST   happy.

The idea that nouns such as *kung* ‘king’ and *drottning* ‘queen’ would belong to the genders FEMININE and MASCULINE is derived from the fact that the meaning components ‘male’ and ‘female’ are very salient, hence that a referent that is referred to by the noun *kung* ‘king’ is also naturally also referred to by the pronoun *han* ‘he’. There are many problems associated with the idea that *kung* ‘king’ and *drottning* ‘queen’ would be morphosyntactically specified

as FEMININE and MASCULINE. One is that very few nouns denote strictly men or women. For some nouns we would have to look out into the world and make frequency calculations before we would determine their gender, for instance *smed* ‘blacksmith’ and *barnmorska* ‘midwife’. It is not reasonable to assume that *smed* ‘blacksmith’ would be a MASCULINE noun because most (but not all) blacksmiths are men and *barnmorska* FEMININE because most midwives (but not all) are women. In sentences such as *Volvo är kung på vägen. Den flyger fram.* (Volvo be.PRS king on road.DEF.C. it.C fly.PRS ahead.) ‘Volvo is the king of the road. It flies.’, we would have to assume that we have a different noun in this context, *kung<sub>2</sub>* ‘king<sub>2</sub>’, since it has a different gender, judging from the use of the pronoun *den* in the second sentence. It would also mean that all nouns that could ever be used for humans, for instance as invectives: *skåp* ‘cupboard’, *hus* ‘house’, *rivjärn* ‘grater’, *brevlåda* ‘mailbox’, *lexikon* ‘encyclopedia’, *dator* ‘computer’ ..., would have a MALE and a FEMALE variant in the lexicon. It does not take much to realize that such a view does not provide any explanatory value. Hence, a more appropriate alternative is to view lexical gender as salient meaning components with a weak meaning, in the sense described above. It is often the case that a weak meaning component motivates the choice of a certain anaphoric pronoun, but this is not always the case. The set of meaning components associated with a noun may gradually change over time, due to linguistic and non-linguistic factors. The meaning components of pronouns – here analyzed as morphosyntactic features – might of course change over time too, but probably more slowly, and in a synchronic perspective they are not negotiable in the same way as nouns.

As pointed out above, lexical gender is a salient meaning component that can also be present in the strong meaning of a pronoun. The term lexical gender usually refers to the meaning components ‘male’, ‘female’; and ‘inanimate’, but, if these meaning components correspond to genders, there is no reason why we should not extend the notion to other components of meaning that could be salient too, such as ‘solid’, ‘round’, ‘black’ etc. The reason why such meaning components are not thought of as lexical gender features is probably that they do not correspond to features that are expressed by pronouns in Swedish and cognate languages.

I have introduced the terms *weak meaning* and *strong meaning* for the meaning components associated with nouns and pronouns, respectively. An implication is that weak meanings are not represented by functional projections in the extended projection of the nouns. Strong meanings, on the other hand, have their own functional projections, as suggested in this chapter.



## 4. Gender, pancake sentences and classifiers

As shown in chapter 3, predicative and attributive adjectives agree in formal gender in Swedish. Nevertheless there are cases where disagreement on adjectives appears to be fully grammatical – this construction type goes under the name “pancake sentences”. The syntax and semantics of this type of construction is the topic of this chapter.

Three examples of so-called “pancake sentences” are exemplified in (4.1) below.<sup>32</sup> As will be discussed in more detail below, (4.1a) represents one type, Type 1, (4.1b) and (4.1c) Type 2, and (4.1d) Type 3:<sup>33</sup>

- (4.1) a *Senap*            *är*            *gul-t.*  
mustard(C)    be.PRS    yellow-N  
‘Mustard is yellow.’
- b *Två älskare*        *är*            *omoralisk-t.*  
two lover(C).PL   be.PRS    immoral-N  
‘To have two lovers is immoral.’
- c *Pannkakor*        *är*            *nyttig-t.*  
pancake(C).PL be.PRS    healthy-N  
‘Pancakes are healthy to eat.’
- d *Henne i en sportbil*    *vore*    *trevlig-t.*  
her    in INDF.C   sports.car(C)   be.CONJ nice-N  
‘To have her in a sports car would be nice.’

As the glossing indicates, *senap* ‘mustard’ in (4.1a) is a common gender noun, *två älskare* ‘two lovers’ and *pannkakor* ‘pancakes’ in (4.1b) and (1c) are noun phrases in the plural (*älskare* ‘lover’ and *pannkaka* ‘pancake’ are common gender nouns, whereas *henne i en sportbil* in (4.1d) is presumably a small clause, i.e. a construction that contains a secondary predication, see Stowell 1981, 1983). Consequently, there is no apparent source for predicative agreement in the neuter.

---

<sup>32</sup> “Pancake sentences” have been the subject of a substantial amount of studies in the Wessén(1969); Faarlund (1977); Malmgren (1990) [1984]; Hellan (1986); Källström (1993); Teleman & al (1999); Enger (2004); and Josefsson (2009). The term “pancake sentences” is due to the fact that the NP *pannkakor* ‘pancakes’ is typically used to exemplify the sentence type (cf. (4.1c).

<sup>33</sup> Swedish verbs do not agree in number or person.

In this chapter we shall consider and reconsider both the idea that the sentences in (4.1) display disagreement, and that the *t*-agreement that does show up in this construction is in the singular (and neuter). Instead I will argue that the inflection in question spells out just the feature neuter, but not number.

The outline of this chapter is as follows: In 4.1 I present the classifier analysis of pancake sentences, presented in Josefsson (2009, 2010). Section 4.2 is a short introduction to Pelletier's Universal Packager/Universal Grinder. A classifier analysis of pancake sentences is presented in 4.3.

## 4.1 Nominal elements that lack number

The syntax and semantics of pancake sentences are discussed in Josefsson (2009, 2010), and one of the main points in these studies is that the agreement on the adjectives in question is not agreement in NEUTER SINGULAR, but agreement in NEUTER only. The underlying assumption is that nominal elements can be either in the PLURAL, in the SINGULAR, or altogether devoid of a number feature. The type of nominal elements that typically lack a number feature are substance nouns and collectives (or rather nouns used as substance nouns or collectives), complex event noun phrases (in the sense of Grimshaw 1992), as well as finite and non-finite clauses. When coordinated, elements of this type do not trigger agreement in the plural, but *t*-agreement.

- (4.2) a *Grädde och mjölk är \*gul-a/OKgul-t.*  
 cream(C) and milk(C) be.PRS yellow-PL/yellow-N  
 'Cream and milk are white.'
- b *Knivkastning och haschrökning är \*skadlig-a/OKskadlig-t.*  
 knife.throwing(C) and pot.smoking(C) be.PRS harmful-PL/harmful-N  
 'Knife-throwing and fire-eating are harmful.'
- c *Att Bo sjunger och att Lisa spelar är \*trevlig-a/OKtrevlig-t.*  
 that Bo sing.PRS and that Lisa play.PRS be.PRS nice-PL/nice-N  
 'That Bo sings and that Lisa plays is nice.'

The idea is that plural agreement is triggered either by a pronoun or noun in the plural, such as *we*, *they*, *cats*, and *wars*, or by conjoined NPs, where the elements in the coordination carries

the value singular. Consequently, the members of the conjoined pairs in (4.2) do not carry the value singular – if they did the subject would trigger agreement in the plural.<sup>34</sup>

Another argument comes from pronominal doubling; if a doubling pronoun is supplied in the examples in (4.3), it is preferably the “non-plural” *det* (it.N) ‘it’, not the plural *de* ‘they’. (The term non-plural is not altogether felicitous, but the meaning is ‘absence of number’.)

- (4.3) a *Grädde och mjölk, (det) är gul-t.*  
 cream(C) and milk(C), (it.N) BE.PRS yellow-N  
 ‘Cream and milk, that’s yellow.’
- b *Knivkastning och haschrökning (det) är skadlig-t.*  
 knife-throwing(C) and pot.smoking(C) (it.N) be.PRS harmful-N  
 ‘Knife-throwing and smoking, that’s harmful.’
- c *Att Bo sjunger och att Lisa spelar, (det) är trevlig-t.*  
 that Bo sing.PRS and that Lisa play.PRS,(it.N) be.PRS nice-N  
 ‘It’s nice that Bo sings and that Lisa plays.’

The lack of plural agreement in (4.2) and (4.3) is natural if we consider the following: Let us assume that we have two containers of a substance, for instance two cups of milk, and then pour the contents of the two cups into a larger container. The result is not two instances of milk, but more of the same – not *\*two milks* but *more milk*. The reason why neither *knivkastning och haschrökning* ‘knife-throwing and pot-smoking’, nor the conjoining of the two clauses in (4.3c) gives rise to plural agreement is, according to Josefsson (2009), that the elements do not correspond to countable entities, entities that are bounded in space. Accordingly, the idea that *t*-agreement in examples such as (4.2) and (4.3) expresses singular by default, as suggested, in for example, Teleman & al. 1999: part II, 226, is a misinterpretation of the fact that neuter noun phrases that unambiguously are in the singular also trigger *t*-inflection on the adjective. In terms of Distributed Morphology we would probably assume that /t/ carries only the feature NEUTER, hence that it can be inserted in all

---

<sup>34</sup> An interesting question is of course what happens if a nominal element without a number feature and a nominal with a number feature are coordinated. In Swedish it seems as if the value No Feature overrides +NUMBER, and that the agreement in *-t* is what is chosen:

- (i) *??Senap och en raps-åker är gul-t.*  
 mustard(C) and INDF.C rapeseed-field(C) be.PRS yellow-N

It should be pointed out that sentences such as (i) are not altogether felicitous in Swedish. For more discussion on how languages handle “gender resolution”, see Corbett (1991, 261f).

terminal nodes with this feature specification, both when the node in question carries the feature SINGULAR and when no number feature is present at all.

## 4.2 Classifiers and The Universal Packer/The Universal Grinder

So far we have discussed the question why agreement in examples such as (4.2) and (4.3) is not in the plural. What remains to be explained is why agreement is in the neuter.

Before suggesting a source for the feature NEUTER, let us consider another case of what on the surface looks like a gender switch. The nouns *kaffe* ‘coffee’ and *öl* ‘beer’ are neuter gender nouns, which is evident if take the value of the suffixed article to be the true indicator of the noun’s formal gender. (This is one of the results of chapter 2.)

- (4.4) *Kaffe-t*                      *är*                      *stark-t!*  
          coffee-N.DEF              be.PRS              strong-N  
          ‘The coffee is strong.’

However, in “portion/serving” contexts substance nouns of this type are regularly treated as common gender nouns:

- (4.5) *Kan*                      *jag*                      *få*                      *en*                      *kaffe.*  
          can.PRS              I                      have                      one.C                      coffee(N).  
          ‘Can I have a coffee?’

The question is how we can account for the common gender of the “portion” reading of (4.5).

Following Rothstein (2011), I assume that a “coerced” reading, such as the one conveyed in (4.5), involves an element that is not present in the default or “normal” cases. This element – the “portion maker” – is presumably related to Pelletier’s “Universal Packager” (Pelletier 1979, 1991). I will also assume that the element conveying this reading is a classifier or a classifier-like element, which shares properties with classifiers in “classic classifier languages”, such as Japanese, though optionally.<sup>35</sup>

There are other constructions that seem to contain a classifier too. In some cases this element is overt, such as *en låda* ‘a box’ in (4.6a) or *en kopp* ‘a cup’ in (4.6b). (As the translation

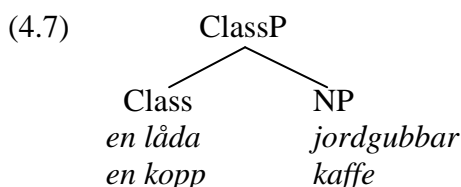
---

<sup>35</sup> According to Crystal (1999, 57), a classifier is a “linguistic form which indicates the semantic class to which a group of words belongs”. Examples of semantic classes that can be expressed by a classifier are size, animateness, and shape.

shows, English does not seem to have the option of using classifiers in the same way as Swedish.)<sup>36</sup>

- (4.6) a *Jag köpte en låda jordgubbar.*  
 I buy.PST INDF.C box.C strawberry.PL  
 ‘I bought a box of strawberries.’
- b *Ge mig en kopp kaffe!*  
 give.IMP me INDF.C cup.C coffee(N)  
 ‘Give me a cup of coffee!’

A reasonable assumption is that the phrases *en låda* ‘a box’ and *en kopp* ‘a cup’ are classifiers, located in a separate projection, which I will term a Classifier phrase:<sup>37,38</sup>



If we apply a classifier analysis to the sentences in (4.5) and (4.6), we may conclude that the “meaning” of the Classifier in (4.5) is ‘one piece’, where ‘piece’ could correspond to ‘a serving’, ‘a glass’, ‘a portion’ etc., in other words a conventionalized portion of X (see Pelletier 1979). It is not clear whether the determiner-like element *en* (INDF.C) ‘one, a’ could function as a classifier on its own, or if *en* takes a phonologically null head noun as its complement, but since the question is not crucial for my proposal the discussion will not be pursued. Consequently, the idea is that there is no gender switch in examples such as (4.5) – the “head noun” is still a neuter noun. What is added to the derivation is another element with a different inherent formal gender. This conclusion is supported by the observation that the

<sup>36</sup> The construction type is discussed in Delsing (1993), even though Delsing does not use the term classifier.

(4.1) <sup>37</sup> For an elaboration of the idea that examples, such as (4.6a) and (4.6b) contain classifiers, see Rothstein (2011).

<sup>38</sup> The structure of the Classifier Phrase is presumably more elaborated; since *en låda* ‘a box’ in (4.7) is phrasal, it is located in the specifier of the Classifier Phrase. However, by virtue of Spec-Head agreement, the head of the Classifier Phrase is endowed with the features of its specifier.

common gender in (4.8) cannot be realized as a suffixed determiner, this feature is exposed only on the element *en* ‘a/one’.<sup>39</sup>

- (4.8)    *\*Här kommer kaffe-n.*  
          here come.PRS coffee-DEF.C

As we have seen, the alleged “gender shift” in (4.6) is not a true gender shift. The example in (4.7b) involves a neuter head noun (*kaffe* ‘coffee’), being used together with a common gender classifier. Now consider (4.9), which shows the reversed case, a common gender head noun, used with a neuter classifier, *ämnet* ‘the substance’. Note that the neuter classifier *ämnet* ‘the substance’ triggers agreement on the predicative adjective.

- (4.9)    *Ämne-t tjära är klibbig-t.*  
          substance-DEF.N tar(C) be.PRS sticky-N  
          ‘Tar is sticky.’

(10) below is identical to (4.9), except for the overt classifier:

- (4.10)   *Tjära är klibbig-t.*  
          tar(C) be.PRS sticky-N  
          ‘Tar is sticky.’

My proposal is that (4.10) has basically the same structure as (4.9), the crucial difference being that the classifier in (4.10) is null. The common structure for (4.9) and (4.10) is presented in (4.11).

- (4.11)   *Øneut/ämne-t tjära är klibbig-t.*  
          Ø<sub>NEUT</sub>/substance-DEF.N tar(C) be.PRS sticky-N  
          ‘Tar is sticky.’

More specifically, the assumption is that there is a null classifier in (4.10) of a more general type, which has a formal gender feature, neuter, but it lacks a number feature; hence, it is more or less a null version of the *det* ‘it’ in (4.3) above.

What is important is that (4.11) shows the basic structure of pancake sentences of the type exemplified in (4.1a). The subject of this classifier element is headed by a null neuter classifier, which is devoid of a number feature. The classifier in question accounts for the substance reading of the subject. ((4.12a) is identical to (4.1a).)

---

<sup>39</sup> As will be shown in chapter 5, the frequent use of nouns in constructions such as (4.6) and (4.10), with a “Universal Packer” or “Universal Grinder” reading, where the opposite formal gender is used, may trigger a reanalysis of the formal gender of the noun itself.

- (4.12) a *Øneut Senap*      *är*      *gul-t.*  
                  mustard(C) be.PRS.      yellow-N  
                  ‘Mustard is yellow.’
- b *Ø<sub>NEUT</sub> Morot*      *är*      *gul-t.*  
                  carrot(C) be.PRS      yellow-N  
                  ‘Carrot (viewed as a substance) is yellow.’
- c *Ø<sub>neut</sub> Morötter*      *är*      *gul-t.*  
                  carrot(C).PL be.PRS      yellow-N  
                  ‘Carrots (viewed as an aggregated substance) are yellow.’

Note that *morot* ‘carrot’ in (4.12b) does not have an individuated or countable reading, but a substance or mass reading. The same applies to the plural *morötter* ‘carrots’ in (4.12c), which has an aggregated substance reading; it is conceived of as a mass, consisting of smaller parts.<sup>40</sup> Another example of the same type is given in (4.13):

- (4.13) *Kokt-a havre-gryn*      *är*      *kladdig-t.*  
                  boiled-PL oat-grain-PL be.PRS      sticky-N  
                  ‘Boiled oat grains are sticky.’

The reading of the subject *kokta havregryn* in (4.13) is that of an aggregated substance. This example shows that the noun does not have to be bare, in order for such a reading to be obtained. What seems to be crucial is that the adjective, ‘boiled’ in (4.13), does not give rise to a kind or sort reading. It should be pointed out that plural agreement on the predicative adjective in (4.13) is fine too, but that the reading is somewhat different; the meaning of the sentence would be ‘boiled oat grains, viewed as individuals, are sticky’. As expected, this is the same type of reading that plural agreement on (4.12c) would give rise to. Hence, an

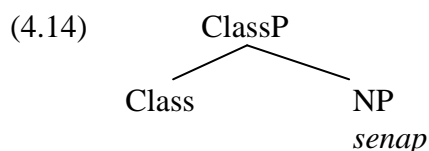
---

<sup>40</sup> It should be pointed out that the type of pancake sentences shown in (4.12c) is not so frequent in actual language. However, the “individual” vs. aggregated substance reading is probably present in pairs such as (i) and (ii) below, where *mycket bilar*, litt. ‘much cars’ in (i) has an aggregated mass reading, whereas *många bilar* ‘many cars’ in (ii) has an individuated reading.

- (i) *Det är*      *mycket bil-ar*      *i stan.*  
      it be.PRS      much car-PL      in town.DEF.C  
      ‘There are many cars in town.’
- (ii) *Det är*      *många bil-ar*      *i stan.*  
      it be.PRS      many car-PL      in town.DEF.C  
      ‘There are many cars in town.’

example such as *Morötter är gul-a* (carrot.PL be.PRS yellow-PL) simply means ‘Carrots are yellow’.

The basic structure of the subject of pancake sentences is given in (4.14), which should be compared to (4.7) above.



According to Josefsson (2012, in press) the important meaning properties of this classifier are derived from the absence of a number feature. The semantics corresponding to the number feature is countability, which, in turn is interpreted as ‘boundedness in space’. The prerequisite for countability is that the elements that are to be counted can be distinguished from each other. Consequently, the semantics of the absence of number is non-countability. This does not mean that a non-countable meaning is the same as a SUBSTANCE reading. Instead, a classifier of this kind would open for different kinds of meanings which all have the absence of the component BOUNDED in common. The interpretation of the noun phrase could for example be that of substance, collective, event (including state), and property.<sup>41</sup>

So far I have suggested that Swedish has a number of classifiers, overt ones, such as *en meter* ‘a meter’, *en låda* ‘a box’, and *ämnet* ‘the substance’, and at least one null classifier, corresponding to the Universal Grinder. In this respect Swedish seems to differ from, say, English. The same semantics is available in English as in Swedish, though. Crucially, where Swedish uses the “classifier construction”, English makes use of another syntactic construction, NP+ PP (cf. 4.15b), and so does Icelandic (cf. 4.15c):

- (4.15)
- |   |                            |            |                  |           |
|---|----------------------------|------------|------------------|-----------|
| a | <i>en</i>                  | <i>ask</i> | <i>choklad</i>   | Swedish   |
|   | INDEF.C                    | box        | chocolate        |           |
|   | ‘a box of chocolates’      |            |                  |           |
| b | <i>a box of chocolates</i> |            |                  | English   |
| c | <i>kassa</i>               | <i>af</i>  | <i>súkkulaði</i> | Icelandic |
|   | box                        | of         | chocolate        |           |

<sup>41</sup> The idea that event categories lack a number feature, hence are not countables, is not as straightforwardly evident as the assumption that for instance substances lack a number feature. This idea goes back to Grimshaw, who shows that so-called complex event nouns cannot be pluralized.



‘a box of chocolates’

The same type of “Universal Grinder classifier” as proposed above is presumably present in the sentence in (4.16) below. In this case the interpretation of the subject is slightly different:

- (4.16) *Øneut pannkakor är nyttig-t.*  
 Ø<sub>N</sub> pancake(C).PL be.PRS healthy-N  
 ‘To have pancakes is healthy.’

The meaning of (4.16) is that of a generic event, ‘to have pancakes’. Josefsson (2009) therefore argues that the complement of the classifier (which in this study is called “semantic head”) is a vP:

- (4.17)
- 
- ClassP:  
 Class vP  
 Ø<sub>NEUT</sub>  
 PRO HAVE *pancakes*

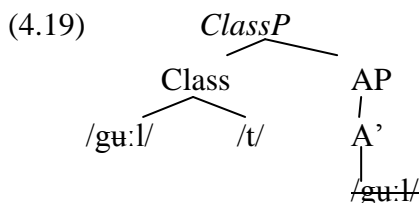
The source of the neuter agreement on the adjective in (4.17) is thus a formal gender feature of the classifier. The classifier is neuter, which means that the agreement pattern is straightforward – there is no disagreement or semantic agreement of a mysterious kind in pancake sentences.

In the sentences discussed so far, the presence of a neuter gender feature on the subject is generally possible to retrieve only indirectly – from the adjectival agreement. However, there is one case in which the neuter gender on the classifier is taken into use, hence is visible, namely when the subject is an adjective:

- (4.18) *Gul-t är ful-t, grön-t är skön-t.*  
 yellow-N be.PRS ugly-N, green-N be.PRS nice-N  
 ≈ ‘Yellow is ugly, green is lovely.’

My proposal is that the neuter gender of the subject in (4.18), exposed as *-t* inflection on *gul-t* (yellow-N) ‘yellow’ and *grön-t* (green-N) ‘green’, spreads to the adjective by Spec-Head agreement in the usual way (see chapters 2 and 3). As suggested in the previous chapters, I assume that the neuter gender is a phonological feature, /t/ (with the allomorph /ɛt/), This feature may combine with the adjectival head, yielding the forms *gul-t* and *grön-t* in (13). If

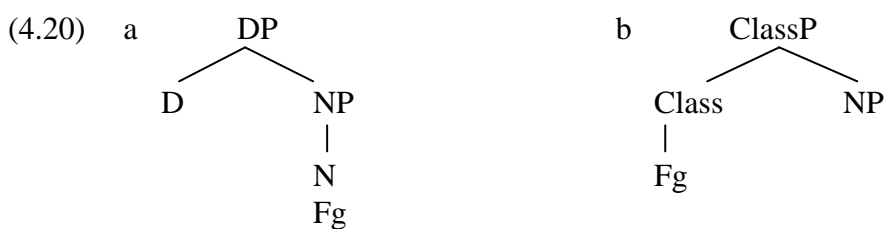
the classifier element /t/ is merged in the classifier head, the adjective is presumably raised and left-adjoins to this feature, giving rise to the form *gul-t* (yellow-N) ‘yellow’, see (4.19).



Generalizing the proposed analysis, we may tentatively assume that *that*-clause subjects are headed by classifier phrases too, the general meaning of which is derived from the absence of number. A more specific meaning, such as that of substance, collective, state or property, is determined contextually, or rather, a classifier devoid of number is compatible with different complements. And just as the phonology of the formal gender of nouns is taken into use when needed for independent reasons (see chapters 2 and 3, this volume), the phonological features of the classifiers in question are used “when needed”, for instance to inflect the adjective. If not needed, the formal gender feature stays silent.

### 4.3 Classifiers, formal gender, and semantic gender – a unified account

According to the proposed analysis, the formal gender feature of a ClassP is different from the formal gender features on nouns, which are devoid of meaning. The two sites for a formal gender feature are illustrated in (4.20) below:



In both cases the formal gender feature is assumed to be a phonological feature, either a neuter gender feature, which is /t/ or /ɛt/, or a common gender feature, /n/, /ɛt/ or /Ø/. (The /Ø/ allomorph amounts to saying that the formal gender feature is not phonologically realized.)

I have proposed that sentences such as (4.12b) *Morot är gul-t* (carrot is yellow-N) ‘Carrots are yellow/Carrot is yellow’ are headed by a classifier. It is reasonable to assume that such a

classifier is present also in noun phrases such as (4.21) below, even though we find no morphological evidence for it. (*Vete* ‘wheat’ and *korn* ‘barley’ are neuter nouns.)

- (4.21) *Vete/korn*                      *är*                      *grön-t*.  
wheat(N)/barley(N) be.PRS                      green-N  
‘Wheat/barley is green.’

The proposed analysis provides a solution to a problem that has been discussed vividly in Scandinavian linguistics. The subject of pancake sentences, such as the ones in (4.1b) and (4.1c) can be rewritten as infinitival clauses:

- (4.22) a *Gröt*                      *är*                      *nyttig-t*.  
oatmeal(C) is                      healthy-N  
‘It’s healthy to eat oatmeal.’
- b *Att äta gröt*                      *är*                      *nyttig-t*.  
to eat oatmeal(C) is                      healthy-N  
‘It’s healthy to eat oatmeal.’

Analyses that draw on the possibility of expanding the subject of a pancake sentence to an infinitival clause are Faarlund (1977) and the Norwegian Reference Grammar (Faarlund, Lie & Vannebo 1997:767), where the subject of a pancake sentence is assumed to be a pruned clausal structure. In order to arrive at (4.22a) a portion of (4.22b) would have to be pruned or deleted:

- (4.23) *Att äta gröt*                      *är*                      *nyttig-t*.  
~~to~~—~~eat~~ oatmeal is                      healthy-N  
‘It’s healthy to eat oatmeal’

Enger (2004) dismisses a pruning analysis of pancake sentence. His main argument is that there are so many ways of rewriting a pancake sentence such as the one in (4.22a) that a pruning analysis would not be restrictive enough to have any explanatory value. Enger appeals instead to Corbett’s Agreement Hierarchy (Corbett 1979; 1991:226), claiming that the pancake sentence construction is best analyzed in terms of semantic agreement; the subject of a pancake sentence is a noun phrase that is less individuated than an “ordinary” noun phrase. However, data shows that the subject of pancake sentences is not simply a noun phrase – there is more structure than we can actually see. (4.24a) shows that adverbial modifiers can be

added to the subject, without a V2, violation; as (4.24b) shows, a sequence of noun phrase + an adverbial is not possible in “ordinary” clauses.<sup>42</sup>

- (4.24) a [[*Två älskare*] [*varje kväll*]] *är* *omoralisk-t*.  
 two lover(N).PL each night be.PRS immoral-N  
 ‘To have two lovers each night is immoral.’

- b \*[[*Två älskare*] [*varje kväll*] *haffades* *av* *polis-en*.  
 two lover(N).PL each night caught.PST.PASS by police-DEF.C  
 ‘Two lovers were arrested each night by the police.’

The fact that two phrases may precede the finite verb in the pancake sentence in (4.24a) without causing a V2-violation indicates clearly that the two phrases are contained in a larger phrase – with an Enger style of analysis, examples such as (4.24a) cannot be explained (the NP *varje kväll* ‘each night’ can definitely not be analyzed as an attributive modifier).<sup>43</sup> Furthermore, (4.25) shows that the subject of a pancake sentence may contain a reflexive pronoun.

- (4.25) *Fest för sina närmaste vid födelsedagar är självklar-t*.  
 party(N) for REFL closest at birthdays be.PRES natural-N  
 ‘To have parties for one’s family at birthdays is natural.’

If we assume that a reflexive requires some kind of subject binder, we will have to assume that the preverbal constituent in (4.25) contains a subject (PRO, pro, operator ...) along with a null verbal predicate that assigns a theta-role to the object *fest* ‘party’. The semantics of the predicate would be ‘have’. To account for all these properties, Josefsson (2009) advocates for a solution where the subjects of pancake sentences with a propositional or event reading are *v*Ps with a basic level predicate, such as HAVE, HOLD, GET, DO, MAKE, and SET, filling the *v* position. The set of verbs matches Butt’s (2003) list of light verbs. Most importantly,

<sup>42</sup> The same is shown in Teleman & al. (1999), too, which treats pancake sentences under the heading “Flerledade satsförkortningar” (multi-phrasal non-finite clauses). See also Hansen (1971, pp. 23–24), who gives the following example:

- (i) *En bil efter moms-forhøjelsen bliver alt for dyr-t*.  
 INDF.C car(C) after VAT-raising.C.DEF become.PRS far too expensive-N  
 ‘To get a car after the raising of the VAT will be too expensive.’

<sup>43</sup> VP-topicalization works in a parallel manner; the whole VP *serverar pannkakor till sina vänner* is located in Spec CP in (i):

- (i) [*Serverar pannkakor till sina vänner*]<sub>VP</sub> *gör han ofta*.  
 serve.PRS pancake(C).PL to REFL friend.PL do.PRS he often.  
 ‘He often serves pancakes to his friends.’

however, accusative pronouns may occur as the subject of pancake sentences. (4.26) is a repetition of (4.1d):

- (4.26) *Henne i en sportbil vore trevlig-t.*  
 3SG.FEM.ACC in INDF.C sport.car(C) be.SUBJ nice-N  
 ‘To have her in a sports car would be nice.’

Only nominatives are allowed as subjects in Swedish, as opposed to languages, such as English and Danish, where accusative forms may occur in the subject position (see Parrott 2009). The most reasonable way to explain the accusative form *henne* ‘her’ is to assume that there is an external case assigner, such as a verb or a preposition. Semantic and morphological properties indicate that *henne i en sportbil* in (4.26) is a small clause; on a par with *varje kväll* ‘every night’ in (4.24) it is not possible to analyze the phrase *i en sportbil* ‘in a sports car’ as an attributive modifier. To accommodate examples such as (4.26) in an analysis where the subject of a pancake sentence is a simple noun phrase would in my view not be possible.

To conclude: I have suggested that pancake sentences are headed by a Classifier projection, and that this (null) classifier is neuter, but devoid of number, which makes different kinds of readings of the subject available: substance, aggregated substance, event, property. A consequence of the proposed analysis is that agreement between the subject and the predicate is straightforward. It is indeed semantic in nature, but not in the way proposed by Enger (2004), where the notion of semantic agreement is viewed as a solution that stands in an opposition to morphosyntactic agreement. According to the analysis proposed here, agreement is both morphosyntactic and semantic. The semantics is due to the absence of number.

The analysis of pancake sentences proposed in this chapter will be used to shed more light on the gender system in the Danish, especially in the Jutlandic dialects, where the distinction between common gender and neuter has become semantic. Particularly striking is this in West Jutlandic, which has developed a prenominal determiner, but lacks a suffixed one. The gender systems of Danish are the topic of the next chapter.



## 5. Gender in Danish – towards a semanticization of formal gender

Standard Danish – at least the way it is described in the traditional literature – and standard Swedish are very similar from the point of view of gender systems. Both languages have a two-way formal gender system on nouns, which are either common gender or neuter, and in both languages the formal gender is expressed on the suffixed determiner:

- (5.1)      *bil-en*,                      *hus-et*                      Standard Danish, Standard Swedish  
              car-DEF.C                      house-DEF.N  
              ‘the car’                      ‘the house’

As shown in chapter 2, formal gender is arbitrarily distributed (although there is a tendency that nouns denoting inanimate, abstract, and non-bounded entities are neuter). Some of the Danish dialects, however, differ in interesting ways from standard Danish and standard Swedish. The most interesting variety, from the point of view of gender, is West Jutlandic, which will be in focus in this chapter. Interestingly enough, the gender system in standard Danish is changing too, and seems to be heading in the same direction as West Jutlandic. In this chapter we shall start out by considering gender in Jutlandic, in particular West Jutlandic, as well as in standard Danish, and then relate our findings to Swedish, where tendencies in the same direction can be discerned, primarily in the possibility of using “pancake sentences”, which was described in chapter 4.

### 5.1 Gender in West Jutlandic

West Jutlandic differs from Standard Danish, as well as from the rest of the Scandinavian languages and varieties, in two important ways. First of all, the definite determiner in West Jutlandic is a free, pronominal element, not a suffix.

- (5.2)      *æ*      *mælk*                      *æ*      *hus*  
              DEF milk’                      DEF house  
              ‘the milk’                      ‘the house’                      (Skautrup 1968, part IV, 128)

The noun *mælk* ‘milk’ is neuter in West Jutlandic and *hus* ‘house’ common gender, but, as (5.2) shows, this is not indicated on the definite article, which is uniformly *æ*. What is

traditionally called gender (“køn”) is exposed for example on pronominal modifiers, such as demonstratives (see (5.3a)), and on anaphoric pronouns (see (5.3b)). (This holds true if we assume that nouns have an inherent gender in West Jutlandic. As we shall see below, a more accurate analysis could be that nouns lack an inherent gender in this language variety, and that gender instead is assigned in the course of speech, according to the speaker’s intended meaning. However, for the sake of simplicity to start with we will assume that West Jutlandic nouns have an inherent gender.)

(5.3) a *dén*            *hus*  
           that.C    house  
           ‘that house’

b *æ mælk* ‘the milk’ – *det* (it.N) ‘it’  
    *æ hus* ‘the house’ – *den* (it.C) ‘it’

(Didrichsen 1971, 95)

There is a particular use of *det* immediately preceding a noun, as in *det mælk* (N milk) ‘milk’ that will be in focus in the following. As the discussion goes along, I will argue that *det* in this use is best viewed as a classifier.

The second major difference between West Jutlandic and Standard Danish is more directly related to gender. According to Hansen & Heltoft (2011, II §5.5), the gender system in classical West Jutlandic is semantically based, meaning that countable nouns are COMMON GENDER, whereas uncountable ones are NEUTER. The natural interpretation of Hansen & Heltoft is that nouns do have an inherent gender, but, as opposed to standard Danish, this gender is motivated by the (prototypical) semantics of the noun. However, this is not the only way of viewing the West Jutlandic gender system. In his overview of the Danish dialects, Ringgaard (1971, 30–31) claims that West Jutlandic nouns have no gender at all; nouns are assigned a gender, due to the intended meaning, in the course of speech. Thus, whatever denotes a “thing”, in other words is countable, is assigned common gender, and is referred to by the pronoun *den* (it.C) ‘it’; whatever that cannot be counted, stuff (“stof”), and/or is abstract (“abstrakt”) is assigned NEUTER.<sup>44</sup> This way of thinking about gender is pervasive to speakers of West Jutlandic, according to Ringgaard:

West Jutlandic people have a hard time learning the correct use of gender in Standard Danish. They are often caught by using *en* (INDF.C) and *den* (it.C) about things. But even more often

---

<sup>44</sup> Diderichsen (1971, 95) seems to be of the same opinion as Ringgaard. He claims that NEUTER (intetkøn) is used for substance nouns (stofnavne), and COMMON GENDER (felleskøn) for all countable things (“om alle tællelige Genstande”).



they are caught making reference to substances by using *det* (it.N). The West Jutlandic gender system has gone to their blood to the degree that they do not really understand that substances can be anything but neuter.<sup>45</sup>

Ringgaard (1971, 31, my translation)

An example is *egetræ* ‘oak’, which is assigned COMMON GENDER when the meaning is ‘oak tree’ and NEUTER when the meaning is ‘oak wood’. Another of Ringgaard’s examples is *fisk* ‘fish’. In the following I will draw on Ringgaard’s analysis, assuming that nouns do not have an inherent formal gender in West Jutlandic. The idea that nouns such as *mælk* ‘milk’ are neuter nouns and nouns such as *hus* ‘house’ are common gender nouns in West Jutlandic is a consequence of the fact that *mælk* ‘milk’ almost always is used to denote a substance and *hus* ‘house’ to denote a countable.

In order to better understand the West Jutlandic system, let us take a look at the historical background. According to Skautrup (1968, part IV, 127ff) the West Jutlandic gender system is ultimately the result of phonological changes that started around 1000 AD, when the pronominal definite article was established in this dialect. In the rest of the Scandinavian languages, the definite article became a suffix, as exemplified in (5.1).<sup>46</sup> According to Skautrup, this change caused the basic speech rhythm to be iambic in West Jutlandic, whereas it became trochaic in the rest of the Scandinavian varieties.<sup>47</sup> Later on, the so-called “infortissvækkelsen” affected and transformed the phonological system in Danish – the old vowels [a], [u], and [ɪ] were weakened to [æ], [o], and [e]; in Old Jutlandic all three vowels merged into [ə].<sup>48</sup> According to Skautrup, this change ultimately caused the case system to collapse, and the only morphology left on the noun in West Jutlandic was the plural suffix.

---

<sup>45</sup> The original wording is as follows: “Vestjyder har svært ved at lære sig korrekt rigsdansk genusbrug. Man griber dem ofte i at bruge *en* och *den* om ting. Men endnu oftere griber man dem i at henvise til stof med *det*. Den vestjyske genusinddeling er i den grad gået dem i blodet, at de ligesom ikke kan fatte at stof kan være andet end neutrum.”

<sup>46</sup> Wessén (1965 [1992]), I, 118, points out that a pronominal demonstrative article was sometimes used in a way that is getting close to that of the pronominal article in the very earliest sources of Old Swedish, but that the suffixed one, which started out as an enclitic pronoun, fairly soon became the predominant one.

<sup>47</sup> Skautrup (1968, part IV, 127ff) claims that the introduction of the pronominal article created an iambic rhythm. However, from a theoretical point of view, it could have been the other way around, namely that the prosodic pattern in West Jutlandic at the time favored a pronominal determiner.

Skautrup does not comment on the fact that he draws conclusion about the general speech rhythm from properties of the nominal sphere only.

<sup>48</sup> According to Skautrup the collapse of the case system in Danish took place at the beginning of the fourteenth century. The same process in Swedish occurred later, around 1450, according to Delsing (2013).

However, this inflection was not distinct enough to uphold a gender distinction; hence there was no longer any indication of the formal gender on the noun itself. The “infortissvækkelse” affected the pronominal determiners too, which resulted in a reduction of the whole determiner system, and the masculine *thæn*, the feminine *thæn*, and the neuter *thæt*, were all reduced and merged to a non-distinct *æ*, as in present-day West Jutlandic; this is illustrated in (5.2). Although Skautrup does not mention this explicitly, the underlying mechanism that caused the gender system to change and become semantically based would be that the clues became too weak or too scarce to make it possible for children to learn the traditional formal gender of nouns. In this situation, semantics “kicked in”, and a formal gender system arose, based on meaning.

However, the West Jutlandic system is not just a switch to a semantic system. There seems to be a particular West Jutlandic “construction” that is involved in this change. Whenever a non-countable meaning is intended, *det* + noun is used, for instance *det mælk* (N milk) ‘milk’ or *det sne* (N snow) ‘snow’. Drawing on the previous chapters in this book, in particular chapter 3, I argue that the origin of the use of this *det* is the demonstrative *thæt/det*, used as an independent demonstrative pronoun. As argued in chapter 3, independently used demonstratives such as *det* ‘it, that’ are Ref-pronouns, meaning that they do not take linguistic entities as their antecedents, but discourse entities. Crucially, the “meaning” of such a *thæt/det* seems to have been the same as in Modern Scandinavian that of non-countability – according to the proposal in this study, this meaning is motivated by the absence of a number feature. Typically this gives rise to a substance reading, but other readings are possible too, for instance that of aggregated substance, event, and property. According to Wessén (1965 [1992], part 1, 106f), the demonstrative pronoun *det/thæt* could also be used attributively in Old Scandinavian, for example *þæn man* (that.MASC man(MASC)) ‘that man’ and *þæt barn* (that.N child(N)) ‘that child’. In such cases the demonstrative agrees in formal gender with the head noun. The same would be true for nouns, such as ‘snow’, *thæn snio* (this.MASC snow(MASC)) ‘this snow’. This means that both *thæn* and *thæt* could be used as independent pronouns when reference was made to ‘snow’, but only *thæn* could be used as an attributive demonstrative together with the common gender head noun *snio* ‘snow’. Independently used, *thæn* would refer to ‘snow’ as a countable entity, for example a certain amount (a non-typical use), whereas *thæt* would refer to snow as a non-countable substance (the typical use). When the exponents for the old formal genders disappeared, the reason for using an agreeing attributive *thæn* was lost. The idea that I want to launch is that the independent demonstrative

*thæt* took over in this situation – since it expressed the typical non-countable semantics associated with this type of nouns. At the same time *thæt* lost its demonstrative force. To formulate it differently, my suggestion is that the use of demonstrative *thæt/det* as an attributive pronoun was reinterpreted as a classifier, a proposal that will be developed below.

## 5.2 Gender in East Jutlandic and other Danish varieties

We will return to West Jutlandic, but let us first take a closer look at East Jutlandic and to some other varieties of Danish too, where the language seems to be heading in the same direction as West Jutlandic. According to a study by Torben Arboe (2009), there is a strong tendency in East Jutlandic (and in other varieties of Danish too) to treat nouns as neuter nouns when a substance interpretation of the noun is intended.<sup>49</sup> (For obvious reasons, this “gender switch” can be detected only for nouns that are originally common gender nouns.) For example, the pronominal elements *det* (it.N) and *noget* (some.N) ‘some’ are used together with typical substance nouns such as *mælk* ‘milk’ or *kaffe* ‘coffee’ (which are both common gender nouns in standard Danish), giving rise to expressions such as *noget mælk* (some.N milk) ‘some milk’ and *noget kaffe* (some.N coffee) ‘some coffee’, instead of *nogen mælk* (some.C milk) ‘some milk’ and *nogen kaffe* (some.C coffee) ‘some coffee’. Some more nouns of the same type are *honning* ‘honey’, *kalk* ‘chalk’, and *ler* ‘clay’, which typically denote substances, but which are common gender nouns, according to the standard or “old” norm. Other nouns that are likely to appear with a neuter pronominal modifier are nouns denoting what in chapter 4 were called aggregated substances, that is, substances consisting of small parts, for example *havre* ‘oats’, *rug* ‘rye’ (and other types of grain), *hør* ‘flax’, *halm* ‘straw’, but also “abstract” nouns, such as *hjælp* ‘help’ and *avl* ‘breeding’. Arboe also mentions abstract nouns such as *modgang* ‘adversity’ and *lighet* ‘similarity’. (Note that nouns such as *avl* ‘breeding’, *hjælp* ‘help’, *modgang* ‘adversity’, and *lighet* ‘similarity’ could be conceived of as nominalizations.) The neuter pronominal modifier *andet* ‘other’ may be used pronominally, for instance, together with the noun *have* ‘garden’ (which is a common gender noun, according to the traditional norm). According to Arboe, a speaker of a Jutlandic dialect might say the following:

- (5.4) *ikke har andet have end potte-planter*  
       not have other.N garden than pot-plant.PL  
       ‘do not have any other garden than pot plants’ Arboe 2009, 16

<sup>49</sup> The term “substance” is my translation of Arboe’s Danish term *stofbetegnelse*.

In a study from 1956, Ella Jensen makes a detailed description of the dialect of Houlbjerg, where the variation between common gender and neuter is quite systematic. (Houlbjerg is situated in East Jutland, west of Aarhus.) The examples below are from Jensen's study (p. 18). (The spelling is slightly normalized, and some diacritics are omitted.)

(5.5)	a	<i>de bomul</i>	(N cotton)	<i>bomulen</i> (cotton.DEF.C)
	b	<i>de row</i>	(N rye)	<i>row'n</i> (rye. DEF.C)
	c	<i>de sop</i>	(N soup)	<i>sopen</i> (soup. DEF.C)
	d	<i>de jo'e</i>	(N soil)	<i>jo'in</i> (soil. DEF.C)
	e	<i>de kalk</i>	(N chalk)	<i>kalken</i> (chalk. DEF.C)

According to Jensen, a pronominal modifier in the neuter, as in the left-hand column, is obligatory when a substance interpretation is intended (in Danish, when it is used as a "stofbetegnelse"). The suffixed determiner is used in other cases. Note that the suffixed determiner inflects for common gender.

In her investigation of the Houlbjerg dialect, Jensen, noted that the noun *jord* 'soil' could be used with a pronominal element *no*, which is the neuter form of 'some': *no 'gât 'joa* (some.N good soil) 'some good soil', but when a specific quantity was intended, the suffixed determiner inflecting for common gender was used: *'jo'in wa grawt 'âp* (soil.DEF.C ) was dug up) 'the soil was dug up' (Jensen 1956, 18). Nouns denoting grains, for example *byg* 'barley' behave in a similar way: *no gât byg* (some.N good barley) 'some good barley', but *no hâa han bygn in* (now has he barley.DEF.C in) 'now he's got the barley in'. As the examples show, the quantity does not have to be explicitly mentioned for the suffixed (common gender) determiner to be grammatical; it is enough if a specific quantity is intended or implied.

According to Arboe (p.c.) speakers of Vendsyssel (northeast Jutlandic) made a distinction between *sopen* (soup.DEF.C) 'the soup' and *de sop* (N soup) 'the soup'.<sup>50</sup> The same distribution is reported from Tolstrup (also Vendsyssel): *de sop – sopen*.<sup>51</sup> Arboe also reports that a distinction is made in the dialect of Randerseggen (Mideast Jutlandic) between *noget godt Suppe* (some.N good soup) 'some good soup' and *Suppen er varm* (soup.DEF.N is warm) 'the soup is warm'.

<sup>50</sup> The Vendsyssel dialect had three genders; *sop* 'soup' was feminine.

<sup>51</sup> The observation was made in the 1860s by K. J. Lyngby, see Arboe (2009).

Arboe (2009) argues that in East Jutlandic, many originally common gender nouns have gone all the way and become neuter nouns, in the sense having neuter as their formal gender, after having gone through a period of variation of the type just described. According to Arboe (p. 27), the most reliable evidence that such a transition has taken place is that the noun is used with a neuter definite suffix. Some nouns to which this has happened in various dialects in North East Jutlandic are *mælk* ‘milk’, *mad* ‘food’, *honing* ‘honey’, *kaffe* ‘coffee’, *brændevin* ‘brandy’, *akvavit* ‘aquavit’, *dyppelse* ‘dipping’, *byg* ‘barley’ (and other kind of grain), *is* ‘ice’, *sne* ‘snow’, and *to* ‘wool’ (Arboe 2009, 21–26). The distribution for the various nouns in question differs, which means that the transition from formally common gender to formally neuter (via a period of variation) takes place lexeme by lexeme.

According to Arboe (2009), (see also Kristensen 1902/1903, 34, cited in Arboe 2009), the change from formally common gender to formally neuter takes place in three steps, below exemplified with the noun *mælk* ‘milk’.

(5.6)	Stage 1	Stage 2	Stage 3
	<i>mælk-en</i> ‘the milk’	<i>mælk-en</i>	<i>mælk-et</i>
	milk-DEF.C	milk-DEF.C	milk. DEF.N
	<i>den mælk</i>	<i>det mælk</i>	<i>det mælk</i>
	C milk	N milk	N milk

Stage 1 represents Standard Danish. At stage 2, the prenominal *det* is used when a substance/non-countable interpretation is intended (often with substance nouns such as ‘milk’, ‘coffee’, ‘flour’ etc.). The system is presumably influenced by West Jutlandic, and it allows speakers to differentiate between ‘milk’, viewed as a substance, and ‘milk’ viewed as a countable entity, for instance as a kind or brand. For the noun *mælk* ‘milk’ the use of the neuter form can be traced back in East Jutlandic to around 1550, where it is noted that it is a manifestation of the West Jutlandic type of gender (Arboe 2009, 22). At stage 3 the noun has got a new, semantically motivated, but inherent gender. In his (2009) article, Arboe refers to an investigation made by Jensen (1897), where it is noted that this kind of “final transition” took place for the noun *hør* ‘flax’ at the end of the 1800s. The informant quoted by Jensen notes that the old masculine form *høri* ‘the flax’ is used primarily by elderly people (Arboe 2009, 18).

It would be an attractive generalization if we could conclude that the prenominal determiner is always semantic and the suffixed one formal (and arbitrary) in language varieties where there

is a choice. However, this does not seem to be the case. In a study from 1747 (cited in Arboe 2009, 17), Høysgaard noted that it was possible in his dialect (which Arboe presumes was East Jutlandic, more specifically a variety of the Aarhus dialect) to use both a neuter and a common gender suffixed determiner – though with different interpretations. In Høysgaard’s dialect, the forms *vinen* (wine.DEF.C) ‘the wine’ and *rugen* (rye.DEF.C) ‘the rye’, were used when a particular kind or species was denoted, but *vinet* (wine.DEF.N) ‘the wine’ and *ruget* (rye.DET.N) ‘the rye’, when an indefinite mass or quantity reading was intended (Arboe 2009, 17). (The traditional formal gender of *vin* ‘wine’ is neuter, whereas that of *rug* ‘rye’ is common gender.) As we can see, in this case the neuter–common gender distinction seems to be more generally associated with substance interpretation vs. other interpretations, regardless of where the gender feature is expressed. We shall return to the cases where there is a variation in gender on the suffixed determiner.

Arboe (2009, p. 22) points out that *det* can be used as an anaphoric pronoun for substance nouns, such as *mælk* ‘milk’. This shows that the gender transformation involves the prenominal system too. The use of *den* and *det* as semantic pronouns (Ref-pronouns, according to the framework presented in chapters 2–4, this volume) seems to be a possibility in standard Danish too. Hansen & Heltoft (2011, part 2, paragr. 5.4) report the following authentic utterance.

- (5.7) *Ja, vi ska afvente et tog fra Hovedbanegården,*  
 yes, we shall wait.for INDF.N train(N) from Hovedbanegården,  
  
*så vi bliver lidt forsinket. Vi kører så snart den er kørt.*  
 so we get.PRS little delayed. we go so soon it.C is gone  
 ‘Yes, we’ll wait for a train from Hovedbanegården, so we will be slightly delayed. We’ll leave as soon as it has departed.’

Hansen & Heltoft, 2011, part 2, paragr. 5.4

Note that the common gender pronoun *den* ‘it’ in the second sentence is used to make reference to ‘a train’, cf. *et tog* (INDF.N train) ‘a train’, where the neuter indefinite determiner *et* ‘a’ indicates the formal gender. Hansen & Heltoft call this type of gender “free gender”, and associate it with a tendency to use common gender for “individuated reference”

(“individueret”). Another example from Hansen & Heltoft, which involves an indefinite determiner, is given below:<sup>52</sup>

- (5.8) *Han har masser af svin. Skal vi købe*  
 he have.PRS lots of swine(N).PL. Shall.PRS we buy.INF  
  
*en/et av dem.*  
 one.C/one.N of them  
 ‘He has lots of swine. Shall we buy one of them?’

Hansen & Heltoft, 2011, part 2, paragr. 5.4

Following Josefsson (chapter 2, this volume) the choice in (5.8) between common gender *en* ‘a’ and neuter *et* ‘a’ is a choice between making reference to the noun phrase *et svin* (INDF.N swine) ‘a swine’ or to a countable discourse referent. Following the terminology introduced in chapters 1–3 (this volume), *en* in (5.8) would be a Ref-pronoun, and *et* a Syn-pronoun. What seems to happen in contemporary Danish is that a semantically based system that started in West Jutlandic spreads to the rest of the Danish dialects and varieties. In the next section I will present a more detailed analysis of this change. I will argue that the neuter pronominal elements *det* (it.N) and *noget* (some.N) ‘some’ played a crucial role in this process; they were not indicators of a change, but in a sense caused the change, or at least caused the spread of the change.

### 5.3 The new gender system: the mechanisms of change

In order to understand how the West Jutlandic has influenced East Jutlandic and the other dialects, let us take a closer look at the nature of the pronominal element *det*, which we, so far, have referred to as “a pronominal element”. Traditionally, pronominal *det* is thought of as a demonstrative, for example in *det mælk* ‘the milk’. (This holds for both Swedish and Danish.) To assume that the neuter *det* in *det mælk* ‘the milk’ is always a demonstrative seems to be an oversimplification. In an overview, Skautrup terms neuter *de* (i.e. *det*) and *æ* West Jutlandic articles (“vestjysk artikel”), when used on substance nouns such as ‘milk’: *de/æ mjælk*, and ‘sand’: *de/æ sår* (Skautrup 1968, part 4, 123). For a corresponding common gender nouns *eng* ‘meadow’ and *hus* ‘house’, only *æ* is called an article, not *dén*. Furthermore, on p. 128,

<sup>52</sup> For similar examples in Swedish, see Hagåsen 1992, 62f. Their occurrence is probably much less common in Swedish than in Danish, and most native speakers of Swedish would probably consider them ungrammatical. See also the discussion in Källström 1993, 191f.

Skautrup parallels “æ mand/æ hus” ‘the man/‘the house’ to “æ, de mælk/æ, de sand” ‘the milk/the sand’. This clearly indicates that the neuter *de (det)* has a special status, since Skautrup neither mentions the common gender *den*, nor makes a parallel between *den mand* (it.C man) and *de (det) mælk* (it.C milk) which we would have expected had the pronominal *det* been just a demonstrative, in all respects parallel to the common gender demonstrative *den*. My conclusion is that the pronominal neuter element *det* is not just an ordinary demonstrative, or rather that there is a use of *det* that is not that of a demonstrative. From a semantic point of view we may conclude that there is nothing deictic or “demonstrating” in the way this element is used in examples, such as *det mælk* ‘milk’ in West Jutlandic; its function is to give the noun phrase a substance/non-individuative/partitive/non-countable interpretation.<sup>53</sup> In her description of the East Jutlandic Houlbjerg variety, Ella Jensen calls *det* in constructions such as *det mælk* a noun a *substantivisk Mængdeled* ‘a nominal measurer’. She notes that the tendency to use *det* in this position is much stronger in the Houlbjerg variety (East Jutlandic) than in standard Danish, its use is even obligatory when a substance interpretation is intended. Judging from her examples, as well as the examples in Arboe (2009), it seems as though also *noget* (some.N) ‘some’ can be used in a similar way, along with *meget* ‘much’. (The use of *meget* as a pronominal element is exemplified in the literature, but for our purposes the form *meget* is not very informative, since it does not stand in a clear opposition to a common gender *megen*, the latter belonging to a high style, or even being obsolete (Heltoft & Hansen 2011, part 2, 460).) Arboe calls *det* and *noget* (some.N) ‘some’ gender markers (“genus-markør”) in the East Jutlandic dialects that he investigates. He also notes that the use of *det* and *noget* immediately preceding the noun when a substance interpretation is intended is, in fact, more common in standard Danish than is commonly assumed, and, according to him, it is quite often heard, for instance in combinations such as *det regn* ‘the rain’ and *det music* ‘the music’ in radio programs,, which indicates that the construction (the term construction used in a broad and non-technical sense) is slowly creeping into standard Danish.

From the discussion above it should be clear that Jutlandic *det* and *noget* are not just a demonstrative and an “ordinary” quantifier. The obligatory use of *det* and *noget* (and similar elements) in East Jutlandic, which Ella Jensen pointed out (Jensen 1956, 17f) – in combination with the data from modern standard (or substandard) Danish – indicates that at

---

<sup>53</sup> There is a range of different terms used to refer to the same semantic notion. In the following I will use the term non-countability.



least *det* is a classifier, used when a non-countable interpretation is intended.<sup>54</sup> Thus, what I want to propose is that the West Jutlandic transition, which is traditionally described as a change from a system with arbitrary formal gender to a system with a semantically based gender system, is in fact a transition to a system with classifiers. Consequently, *det* used in a position immediately preceding a noun, as in *det mælk* ‘some milk’, is a classifier. It is the classifier *det* that spread to the other dialects. This spread plays a crucial role in the change of the gender system as a whole in other varieties of Danish, including “standard Danish”, and, as we shall see, Swedish too.

In chapter 4 I proposed that Swedish has classifiers, which may be overt, as in (8a and b) or non-overt, as in (5.9):

- (5.9) a *Ge mig en kopp kaffe.*  
           give me INDF.C cup coffee(N)  
           ‘Give me a cup of coffee.’
- b *Ämne-t olja är klibbig-t*  
           substance- DEF.N oil BE.PRS sticky-N  
           ‘Oil is sticky.’
- (5.10) a *Øneut Olja är klibbig-t*  
           Ø oil(C) is sticky-N  
           ‘Oil is sticky.’
- b *Øneut Senap är gul-t*  
           Ø mustard(C) is yellow-N  
           ‘Mustard is yellow.’

The classifiers in (5.10) do not carry a meaning directly, only indirectly. They lack a number feature, and the meaning that they convey is thus that which can be derived from this absence, categories, such as substance, mass, event, property.

My proposal is that expressions such as *det mælk* ‘the milk’, consisting of a neuter element + a noun, should all be given the same analysis; hence have the structure in (5.11):

---

<sup>54</sup> The proposal that *det* and *nogen* are classifiers in certain contexts does not preclude that they are demonstratives in other constructions.

(5.11)	<div style="text-align: center;">           ClassP            /        \            Class    NP         </div>			
	<i>en kopp</i>	<i>kaffe</i>	(INDEF.C cup coffee)	‘a cup of coffee’ (5.9a)
	<i>ämnet</i>	<i>olja</i>	(substance.DEF.N oil)	‘oil, viewed as a substance’ (5.9b)
	<i>Øneut</i>	<i>olja</i>	(oil)	‘oil viewed as a substance’ (5.10a)
	<i>Øneut</i>	<i>senap</i>	(mustard)	‘mustard viewed as a substance’ (5.10b)
	<i>det</i>	<i>mælk</i>	(N milk)	‘milk viewed as a substance’ (5.6)

The element in the classifier position is what triggers agreement on the predicative adjective on pancake sentences of the type illustrated in (5.10) (in varieties that have predicative agreement on adjectives). (Pancake sentences are discussed in detail in chapter 4 and 5.4, this volume.)

Assuming with Delsing (1993) and others that argument noun phrases have to be DPs, we will have to assume that the ClassP in (5.11) is either conflated with the DP or that there is a DP projection on top of the ClassP. The exact structure is not crucial for my points, so I refrain from further discussion on a more precise structure.<sup>55</sup>

<sup>55</sup> It should be pointed out that a generalization of the analysis, i.e. that all bare nouns – plural and non-plural – have a classifier projection on top, would account for the fact that *det* is used as an anaphoric pronoun in examples such as (i).

- (i) *Räkor, det äter jag gärna.*  
 shrimp(N).PL, it.N eat I with.pleasure  
 ‘I eat shrimps with pleasure.’
- (ii)  $[[\text{Ø}_{\text{NEUT}} \text{räkor}]] [\text{det}_{\text{NEUT}} \text{äter jag gärna } \text{det}_{\text{neut}}]]$ .

Following Platzack (2012) I assume that a sentence with a doubling element has two specifiers in the CP. The element in the lower specifier, *det* in (i), has moved from its base position in the VP. The higher element,  $[\text{Ø}_{\text{NEUT}} \text{räkor}]$ , is merged directly into this position. As indicated in (ii), the relation between the initial element, headed by the classifier  $\text{Ø}_{\text{neut}}$ , and *det* is that of ordinary antecedent – anaphor. It is in principle no different from the relation between *bilen* ‘the car’ and *den* (it.C) ‘it’ in (iii) below:

- (iii) *Bil-en, den ska vi sälja.*  
 car- DEF.C, it.C shall we sell  
 ‘We’ll sell the car.’

The proposed solution is in line with Borthen’s (2003a, 2003b) assumption that *det* in examples such as (i) is a TYPE anaphor. The important difference is that assumption that the antecedent is provided with a functional layer, which provides the antecedent with the syntactic features that accounts for the neuter gender of the pronoun.

One of the reasons why the use of the classifiers *det* and *nogot* could spread from West Jutlandic to the other dialects (primarily East Jutlandic) is that Danish (and the rest of the Mainland Scandinavian languages) already had a classifier system.<sup>56</sup> Some examples from modern Swedish are given in (5.12) below:

- (5.12) a *en låda jordgubbar*  
           a box strawberries  
           ‘a box of strawberries’
- b *en kopp kaffe*  
           a cup coffee  
           ‘a cup of coffee’

In view of the fact that the possibility of expressing the way stuff is measured, packaged, aggregated, or viewed is available more generally in Danish, the introduction of one more classifier would not be anything radically new. However, the new use of *det* had the power to change the system more generally.

In order to understand this process we shall take a closer look at the status of *det* more generally in Danish. In standard Danish the neuter *det* oscillates between a clear modifier, a demonstrative, and a determiner use. The determiner use is illustrated in (5.13b).

- (5.13) a *hus-et*  
           house-DEF.N  
           ‘the house’
- b *det røde hus*  
           DEF.N red.DEF house(N)  
           ‘the red house’

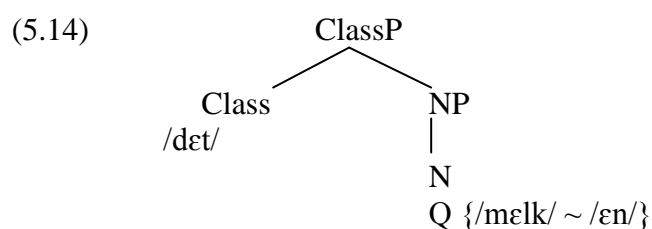
Unlike Swedish, Danish has no double definiteness, which means that the only determiner in (5.13b) is the pronominal element *det*. It is reasonable to assume that it is the multiple function of *det* that allowed it to influence the gender system as such. In other words, when *det* as a classifier spread from West Jutlandic to other dialects it turned out to be a Trojan horse. In the new variety of Danish (with suffixed definite articles) it came to be analyzed as an alternative pronominal determiner and, as such, it was assumed to display the formal gender of the head noun in question. So, the more frequently *det* + a certain noun was used,

---

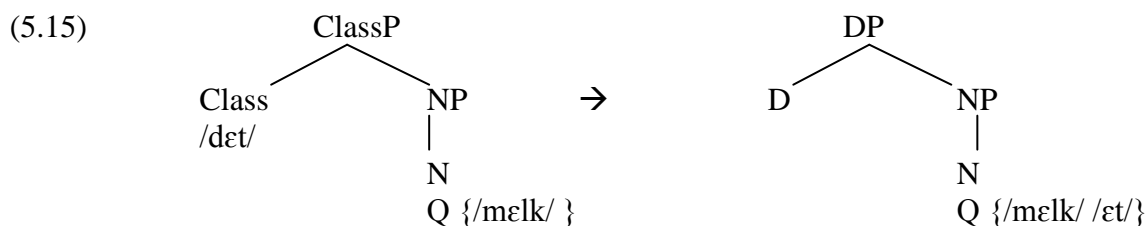
<sup>56</sup> For a description of the “classifier construction” illustrated in (5.11), see Delsing (1993). (Note that Delsing does not give a classifier analysis of this construction.) For arguments that the first NP in this construction is a classifier, see chapter 5 (this volume).

the stronger the association between neuter and this noun became. In the end, a switch of formal gender took place; the older generation used the old formal gender (common gender or masculine/feminine), whereas the younger generation classified the noun as neuter. (This situation was illustrated for the noun *hør* ‘flax’ above.) The role of *noget* (some.N) seems to have had a similar function, though the picture is slightly less clear. However, Heltoft & Hansen (2011, part 2, 485), grant *noget* the status of an indefinite article in modern Danish (for non-individuated nouns, or rather for nouns in their non-individuated use), which means that *noget* may have played a similar role in the indefinite determiner system.

Let us now take a look at the process just described from the point of view of the gender system proposed in chapters 2 and 3 (this volume). In these chapters it was suggested that formal gender is a piece of dummy morphophonology merged together with the phonological matrix of the root, used whenever needed in order to make visible or lexicalize other morphological categories. Within such a system a reanalysis of the prenominal determiner as a classifier poses no theoretical problems. At the initial state, a noun such as *mælk* ‘milk’ may still have the phonological matrix Q {/mɛlk/ ~ /ɛn/} – just as before –, but the formal gender part, /ɛn/ (with its allophones) is not taken into use, simply because it is not needed – which is the case when a classifier does the job of providing the phonological features that are needed. (As pointed out above, the ClassP is either conflated with the DP level, which is needed for the sake of turning the noun phrase into an argument, or plays the same role as a DP in this respect.) Hence, the structure of the noun phrase *det mælk* ‘the milk’ at Stage 2 in the development sketched in (5) is given in (14) below:



A frequent use of the construction *det* + noun, for instance *det mælk*, makes the association between neuter and typical substance nouns, such as *mælk* ‘milk’ stronger, which explains why the formal gender of the noun in question changes. This appears to be what has happened in East Jutlandic, where nouns such as *mælk* ‘milk’ are formally neuter, according to Arboe (2009), see (5.15) below:



If the proposed analysis is on the right track, it implies that the change that East Jutlandic and also Standard Danish are going through is less likely to happen in Swedish, which has double definiteness, meaning that the formal gender is exposed on both the prenominal and the suffixed determiner:

- (5.16)
- |                   |               |               |
|-------------------|---------------|---------------|
| <i>det</i>        | <i>grön-a</i> | <i>hus-et</i> |
| DEF.N             | green-DEF     | house-DEF.N   |
| ‘the green house’ |               |               |

In chapter 4 I proposed that pancake sentences are in fact sentences where the overt subject NP is headed by a classifier projection, with a null neuter classifier. It should come as no surprise that Danish allows pancake sentences. In the next section I will propose that the change of the gender system has affected Swedish too, namely by the introduction of “pancake sentences”, which was described for Swedish in chapter 4.

## 5.4 The semantic gender system and pancake sentences

The semantics of nouns with a prenominal modifier in the neuter, such as those in the left-hand column in (5.5) above, is the same as the semantics of bare nouns in “pancake sentences”, discussed in chapter 4. An example of a pancake sentence is given in (5.17):

- (5.17)
- |                      |           |               |
|----------------------|-----------|---------------|
| <i>Senap</i>         | <i>är</i> | <i>gul-t.</i> |
| mustard(C)           | is        | yellow-N      |
| ‘Mustard is yellow.’ |           |               |

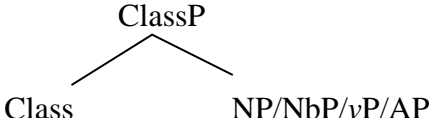
*Senap* ‘mustard’ is a common gender noun, which shows in the fact that the definite article is in the common gender, *senap-en* (mustard-DEF.C) ‘the mustard’. The form *\*senap-et* (mustard. DEF.C) is strictly ungrammatical. Nevertheless, predicative agreement is in the neuter, *-t*.

The subject *senap* ‘mustard’ in (5.17) may be replaced with a noun in the plural, for example *morötter* ‘carrots’:

- (5.18) *Morötter är gul-t.*  
 carrot(C).PL is yellow-N  
 ‘Carrots are yellow.’

As shown in chapter 4 (this volume), the interpretation of the subject *morötter* ‘carrots’ in (5.18) is that of an aggregated substance, i.e. a collective substance consisting of small parts that are assumed to have basically the same size and/or shape.<sup>57</sup>

To account for pancake sentences, I argued in chapter 4 that the subject is headed by a null (or sometimes overt) classifier or classifier-like element. The classifier in question was assumed to be devoid of number, hence possible to combine with different types of nominal projections, not only NPs, as in (5.17) and (5.18), but also NbPs, vPs, and APs.

- (5.19)
- 
- ```

graph TD
  ClassP --> Class
  ClassP --> NP[NP/NbP/vP/AP]
  
```

If the classifier in (5.19) takes an NP complement, the reading is that of SUBSTANCE, if the classifier takes an NbP with the value plural as its complement the reading is that of an AGGREGATED SUBSTANCE. If the complement is a vP, the subject gets an EVENT reading (though devoid of tense and aspect components), for example ‘to have NP’, and if it takes an AP complement the reading is that of PROPERTY. The core idea is that the absence of a number feature on the classifier opens for many different interpretations; the only thing these interpretations have in common is that the interpretation is not that of a countable entity, here defined in terms of boundedness, a prerequisite for countability, as argued in chapter 3. The classifier is generally devoid of phonology, but it triggers agreement on a predicative adjective, viz. *-t* on *gul-t* in (5.17) and (5.18) above. The only instance when the gender feature inherent in the classifier is overt, the inflectional element *-t*, is in cases such as (5.20) below, where the subject is a bare adjective:

- (5.20) *Gul-t är ful-t.*  
 yellow-N is ugly-N  
 ‘Yellow is ugly’.

<sup>57</sup> The type of pancake sentences exemplified in (5.17) is slightly more marginal than examples such as *Pannkakor är läcker-t* (pancake(C).PL is delicious-N) ‘It’s delicious to have pancakes’. However, the type is mentioned in the Swedish Academy Grammar (Teleman & al. 1999). (5.18) is well-formed too, but the range of nouns that can be used seems to be restricted.

A classifier analysis of pancake sentences in Swedish and a classifier analysis of the gender changes that are in progress in Danish suggests that the two phenomena are in fact one and the same. Thus, the idea that I want to propose is that the use of pancake sentences in Swedish involves a classifier of the type used in Danish, and that this is the result of a spread of the classifier from Danish to Swedish. First of all, Danish has pancake sentences, just like Swedish. The examples below are taken from the Internet:

- (5.21) a *Sne er hvid-t.*  
snow(C) be.PRS white-N  
‘Snow is white.’
- b *Sild er god-t.*  
herring(C) be.PRS good-N  
‘Herring is good.’
- c *Pandekager er god-t, pandekager er sund-t*  
pancakes(C).PL be.PRS good-N, pancake(C).PL be.PRS healthy-N  
‘It’s good to have pancakes, it’s healthy to have pancakes.’

From the point of view of timing, the idea that pancake sentences spread from Danish to Swedish seems to hold: The possibility of using pancake sentences in Swedish is not very old; according to Wellander (1985, 184 [1949]) it was not used in Swedish until the beginning of 1900s. It is pointed out in the literature that it is older in Danish (Malmgren 1990, 115) and in Danish Norwegian (Western 1975 [1921]). In my view it should not be controversial to assume that “pancake sentences” are an offshoot of the introduction of a gender-marked classifier in Danish, but where the classifier is (in most cases) phonologically null in Swedish.

As pointed out above, there are classifiers or classifier-like elements in Swedish, such as *ämnet* ‘the substance’, which are fine in Swedish. (*Ämne* ‘substance’ and *sockervadd* ‘candy floss’ are neuter nouns, whereas *olja* ‘oil’ and *substans* ‘substance’ are common gender.)

- (5.22) a *Ämne-t olja är klabbig-t.*  
substance-DEF.N oil(C) is sticky-N  
‘Oil is sticky.’
- b *Substans-en sockervadd är klistrig.*  
Substance-DEF.C candy.floss(C) is sticky.C.  
‘Candyfloss is sticky.’

As the examples in (5.22) indicate, “lexical classifiers” such as *ämne-t* (substance-DEF.N) ‘the substance’ and *substans-en* (substance-DEF.C) ‘the substance’ govern inflection. If the

proposed analysis is correct, the West Jutlandic style of gender system is not just a system where nouns denoting substances are neuter, but should more correctly be defined as a language variety where nouns are typically used in contexts where no number is present are neuter.

According to the proposed analysis the use of pancake sentences in a language presupposes the presence of classifiers, and the introduction of a null classifier in a language presupposes the presence of overt classifiers. Interestingly enough, English and Icelandic are two languages that lack both classifiers as well as pancake sentences.<sup>58,59</sup> In my view, this is not a coincidence. Consider the sentences below:

|        |                      |                         |                           |
|--------|----------------------|-------------------------|---------------------------|
| (5.23) | Danish:              | English:                | Icelandic:                |
|        | <i>en kop kaffe</i>  | <i>a cup of coffee</i>  | <i>bolli af kaffi</i>     |
|        | INDF.C cup coffee    |                         | cup of coffee             |
|        | ‘a cup of coffee’    |                         | ‘a cup of coffee’         |
|        | <i>en meter stof</i> | <i>a meter of cloth</i> | <i>einn metra af efni</i> |
|        | INDF.C meter cloth   |                         | one.MASC meter of cloth   |
|        | ‘a meter of cloth’   |                         | ‘a meter of cloth’        |

The most straightforward way of analyzing the difference between the Danish examples in (5.23) and the English/Icelandic ones is the following one: in the Danish example *en kopp* ‘a cup’ is a classifier element and *kaffe* the head noun. In the English example *cup* is the head noun, on a par with the Icelandic *bolli* ‘a cup’. In both English and Icelandic the PP *of coffee/af kaffi* are postnominal modifiers. The fact that the semantics of the English/Icelandic way of expression is the same as the semantics of the corresponding Danish (and Swedish) ones is not crucial here; there is presumably a common (universal?) need to express quantification, packaging, and aggregation, and it can be conveyed by different syntactic resources.

I have suggested an analysis of the ongoing gender shift in Danish as a process that started in West Jutlandic, when formal gender turned semantic. The crucial element in this change is the neuter pronoun *det*, a demonstrative modifier in West Jutlandic, which, together with *noget* (some.N) ‘some’, and possibly some more elements, was interpreted as a classifier in the varieties to which it spread. Since *det* oscillates between the use as a determiner and a

---

<sup>58</sup> Thanks to Halldór Sigurdsson for bringing this data to my attention.

<sup>59</sup> Note that Rothstein (2011) terms the English construction illustrated in (23) a classifier construction. From a semantic point of view the two ways of expression are parallel.



modifier, it affected the whole system, by its possibility of assigning a different formal gender to nouns. Pancake sentences are constructions with a null neuter classifier in the topmost projection; the introduction of this construction type is in fact the introduction of a non-overt classifier. The use of pancake sentences spread from Danish to Norwegian and Swedish, which both already had classifiers, i.e. an NP quantifier + head noun construction.

There are indications that formal gender is in the process of shifting in Swedish too, although the signs are fairly weak: the use of common gender *den* for referents that normally are referred to by neuter nouns, and a variation between common gender and neuter definite forms, with a “thing” (i.e. bounded) interpretation for the common gender version and a substance reading for the neuter version. One example of this type is *skit* ‘shit’: common gender *skit-en* (shit-DEF.C) means ‘the piece of shit’ and *skit-et* (shit-DEF.N) ‘shit’ as a substance. (The word *skit* is often used metaphorically.) *God-is-en* (good-IS-DEF.C) means ‘the piece of candy’, whereas *god-is-et* (good-IS-DEF.N) meaning ‘candy’ denotes an aggregated substance. Another indication that has similarities with the Jutlandic system is the use of the neuter *något* (some.N) ‘some’, together with a noun. Consider (5.24) below, examples that are all taken from the Internet.<sup>60</sup>

- (5.24) a *något snö*  
           some.N snow(C)  
           ‘around 1 cm of snow’

- b *Flötgröten kokas på grädde och vetemjöl, med något*  
    flöt.porridge.C.DEF boil.PASS on cream and wheat.flour, with some.N  
  
    *mjölk eller vatten och salt.*  
    milk(C) or water and salt

‘The flöt porridge is boiled on cream and wheat flour with a little milk or water and salt.’

- c *nu har jag aldrig något mjölk i kaffet*  
    now have I never any.N milk(C) in coffe.N.DEF  
    ‘Nowadays I never take milk in my coffee.’

- d *varefter man häller över något grädde eller crème fraîche*  
    where.after one pours over some.N cream(C) or crème fraîche  
    ‘after which one pours cream or crème fraîche over it’

---

<sup>60</sup> Thanks to Lars-Olof Delsing for bringing this construction type to my attention!

e *Castrol hydralolja??? något olja för citroen från lokala*  
 Castrol hydraulic oil some.N oil(C) for Citroën from local

*biltillbehörsaffären??*  
 car.accessories.shop

‘Castrol hydraulic oil??? Would it be appropriate for Citroën from one’s local car accessories shop??’

If the possibilities discussed above is merely an example of gender variation that we find normally in languages and or if it is an indication that a gender revolution of the Danish type is about to happen in Swedish, remains to be investigated.

It is clear that Swedish differs from Danish in not using *det* (it.N) or *något* (some.N) as standard (overt) classifiers. However, in Swedish, predicative agreement is generally expressed on adjectives, also in the dialects. (There is no plural agreement on predicative adjectives in Northern Swedish dialects, but that is not relevant for the present study.) Predicative agreement is generally absent (or null) in Jutlandic, with a few exceptions (Skautrup 1968, part 4, 117).<sup>61</sup> Generalizing these observations we may say that a classifier can be overt (primarily neuter *de* (*det*) or *noget*), in which case predicative agreement may be absent/null, or it can be null, in which case it is licensed by predicative agreement. (Note, however, that there should be no ban on the combination overt classifier and predicative agreement.)

It is interesting to note, though, that the proposed route of language change is a well-established one. Other major language changes that have arisen in Jutland and spread to the rest of the Danish area and into Swedish are monophthongization (origin in runic times), the velar R-sound, and, according to Tegnér (1925 [1964]), the introduction of the pronoun *den* (it.C) ‘it’ for inanimate referents.

## 5.5 West Jutlandic – a classifier language/variety?

I have argued that Standard Danish, Jutlandic, and Standard Swedish all have classifiers, but is any of the languages/varieties a classifier language? And how should we look at the transition that West Jutlandic has undergone, from being a gender language?

---

<sup>61</sup> According to Diderichsen (1971, 95), neuter agreement is absent in Jutlandic in general.

Allen (1977) and Corbett (1991) compare classifier systems and gender systems, and point out important differences. Firstly, according to Allen (1977, 290), classifiers carry a meaning, whereas gender is arbitrary. Secondly, according to Corbett (1991, 137), classifiers involve “the selection of one classifier, as opposed to others”, and different classifiers evoke different readings of the noun (see also Dixon 1982, 217–218). The flipside of this view is that gender is not subject to a choice. Thirdly, according to Corbett, gender typically shows up as agreement; classifiers are independent items, which (typically) do not trigger agreement (Corbett 1991, 137). Let us check and see what these criteria tell us about West Jutlandic.

Although there are semantic tendencies in the traditional system of formal gender in the majority of the Mainland Scandinavian languages varieties (substances and abstract entities tend to be neuter), formal gender is arbitrary. It is not possible to predict the formal gender of a noun, and it is not possible to predict the meaning (countable vs. non-countable) on the basis of the formal gender of a noun. In West Jutlandic, on the other hand, neuter, conveyed by independent items, such as *det*, carries a meaning, as shown above, and there is a choice, as how to use nouns, as neuter or as common gender. (In standard Danish there is a certain amount of choice, more so than in Swedish.) The conclusion so far is that the two criteria above – that classifiers carry meaning, whereas gender does not, and that classifiers are subject to a choice – indicate that West Jutlandic has a classifier system. When it comes to agreement, Diderichsen (1971, 95; 177) states that neuter agreement on adjectives is absent in Jutlandic, but present in standard Danish. (Swedish adjectives agree in gender.) A comparison with Allen’s and Corbett’s criteria for classifiers thus indicates that West Jutlandic is a classifier language/variety, and, furthermore, that the rest of the Mainland Scandinavian languages/varieties are not classifier languages, but gender varieties.

In his comparison between classifier systems and gender systems, Corbett (1991, 136ff) shows that classifiers diachronically may be the source of gender systems. If the proposed analysis is correct, it indicates that the reverse may hold too, namely, that gender systems can be a source of classifier systems.

I have argued that standard Swedish, standard Danish, and East Jutlandic all have classifiers – but they are clearly not classifier languages in the same way as West Jutlandic. Arboe shows in his article (Arboe 2009) that there is a strong tendency that nouns in dialects such as East Jutlandic go through a process where they get a new formal gender, which is motivated by the semantics. If this is correct it indicates that the rest of the Danish dialects, as well as Standard

Danish and Standard Swedish, do not necessarily develop into classifier languages, but into a system where formal gender is motivated by the prototypical semantic denotation of the noun. This is different from a system such as West Jutlandic, where gender is assigned by the speaker in the individual utterance. The only evidence that might point in a different direction is Arboe's observation that expressions such as *det musik* (neut music) and *det regn* (neut rain) seem to be on the move in spoken standard Danish. Whether or not Danish will switch over to a semantically based gender system remains to be seen.

## 6. The great gender reduction – from three to two formal genders in Swedish

Old Swedish had a three-way gender system, basically of the same type as in modern Icelandic and German. In the unmarked case, nouns denoting male referents had MASCULINE gender and nouns denoting female referents FEMALE gender. There were exceptions, though, such as *vif* ‘woman’ and *barn* ‘child’, which are both neuter. For nouns typically denoting inanimates, the male–female distribution of nouns was arbitrary, much like in contemporary Icelandic or German. So, even if there were semantic tendencies, when it comes to the distribution of formal gender the system cannot be said to have been straightforwardly semantic in nature.

During a period that started sometime before 1500, until the beginning of the 1900s this three-way gender system was slowly transformed into the present-day two-way gender system of the type described and discussed in the previous chapters, where nouns are either common gender or neuter, and where the common gender pronoun *den* (corresponding to Old Swedish *pän/thän*) ‘it’ or the neuter *det* (corresponding to OSw *pät/thät*) ‘it’, are used for reference to inanimates. As in the old system, *hann* ‘he’ and *hon* ‘she’, are used for reference to animates.

The transition started in the central dialects in the Stockholm area, more specifically in the language variety that developed into what now is standard spoken Swedish. The dialects retained the old system for different periods of time (and some still do). The details of the process – “the great gender reduction” – are described in Herbert Davidsson’s dissertation from 1989. The purpose of this chapter is not to provide new data, but rather to give a more detailed description of the mechanisms that led to this shift, and to interpret it in terms of the analysis proposed in the previous chapters, especially chapters 2 and 3.<sup>62</sup>

---

<sup>62</sup> The gender reduction in Burträsk is described by Thelander (1976), in the Kvexlax dialect (Finland Swedish) by Rabb (2004), in the Östra Nyland dialect (Finland Swedish), by Sandström (2010), and in two dialects of Jämtlandic, Hammerdal and Oviken, by van Epps (2012). For the corresponding change in different variants of Norwegian, see for instance Beito (1954).

## 6.1 Main properties of the old three-gender systems

Let us start out by taking a look at the gender system in Old Swedish. Tables 1 and 2 show the (idealized) paradigms for singular nouns in their definite form.<sup>63</sup> Note the “internal” inflection, for instance *-r-* in masculine, nominative in the strong declension:

|     | MASCULINE                   | FEMININE                  | NEUTER                    |
|-----|-----------------------------|---------------------------|---------------------------|
| Nom | <i>fiskr-inn</i> ‘the fish’ | <i>färþ-in</i> ‘the trip’ | <i>skip-it</i> ‘the boat’ |
| Gen | <i>fisks-ins</i>            | <i>färþ-inna(r)</i>       | <i>skips-ins</i>          |
| Dat | <i>fiski-num</i>            | <i>färþ-inni</i>          | <i>skipi-nu</i>           |
| Acc | <i>fisk-inn</i>             | <i>färþ-ina</i>           | <i>skip-it</i>            |

Table 6.1. Nominal inflection of definite nouns, strong declension, in Old Swedish (Wessén 1965 [1992], 119).

Weak nouns in the indefinite forms ended in a vowel, for instance *andi* ‘spirit’, *vika* ‘week’, and *ögha* ‘eye’, as shown in Table 2 below:

|     | MASCULINE                  | FEMININE                 | NEUTER                  |
|-----|----------------------------|--------------------------|-------------------------|
| Nom | <i>andi-n</i> ‘the spirit’ | <i>vika-n</i> ‘the week’ | <i>ögha-t</i> ‘the eye’ |
| Gen | <i>anda-ns</i>             | <i>viku-nnar</i>         | <i>ögha-ns</i>          |
| Dat | <i>anda-num</i>            | <i>viku-nni</i>          | <i>ögha-nu</i>          |
| Acc | <i>anda-n</i>              | <i>viku-na</i>           | <i>ögha-t</i>           |

Table 6.2. Nominal inflection of definite nouns, weak declension, in Old Swedish (Wessén 1965 [1992], 103–104).

Importantly, the masculine and the feminine forms differed in the nominative and the accusative forms, forms that will be especially important for the analysis proposed in this chapter. The gender reduction consists of a conflation of these forms.

Now consider the third person pronouns. (Since the plural form is of less interest, it is omitted.)

|     | MASCULINE    | FEMININE          | NEUTER     |
|-----|--------------|-------------------|------------|
| Nom | <i>hann</i>  | <i>hon</i>        | <i>þät</i> |
| Gen | <i>hans</i>  | <i>hänna(r)</i>   | <i>þäs</i> |
| Dat | <i>hanum</i> | <i>hänni</i>      | <i>þy</i>  |
| Acc | <i>hann</i>  | <i>hana, hona</i> | <i>þät</i> |

Table 6.3. Third person personal pronouns in Old Swedish (Wessén 1965 [1992], 116–117).

<sup>63</sup> Gemination will be used to mark long consonants, for instance *hann* for /han:/.

The outcome of the language change is a system where the pronouns *han* ‘he’ and *hon* ‘she’ are used for reference to male and female referents, respectively. A new pronoun, *den* (it.C) ‘it’, has emerged, and is primarily used for inanimate. In chapter 3 I argued that the pronoun *den* is not morphologically marked +INANIMATE or –ANIMATE or the like, but lacks this type of marking altogether. The reason why *den* is used for inanimate referents is that the two other pronouns, *han* ‘he’ and *hon* ‘she’, are marked for FEMININE and MASCULINE, i.e. for human reference. The gricean criterion of informativeness governs the choice of pronoun: If a speaker has knowledge of the natural gender of an animate referent s/he will use either of the pronouns *han* ‘he’ and *hon* ‘she’. Hence, if *han* ‘he’ or *hon* ‘she’ are not used, it is presumably because such a meaning is excluded. By implication, the referent of *den* is normally interpreted as inanimate.<sup>64</sup>

From a formal point of view, the pronoun *den* is usually assumed to be derived from the demonstrative *pän*. The use of this pronoun for inanimate referents seems to have started in the central area of Sweden, and it was first used in the aristocracy or educated upper class. It is sometimes believed that this was due to Danish influence (see Tegnér 1925 [1964], 167f; Olson 1913, 59). (More precisely, Tegnér (1925 [1964], 167] suggests that as a personal pronoun, *den* was first used in Jutland.) With the terminology used in this study, *hann* ‘he’ and *hon* ‘she’ changed from being used both as Ref-pronouns and Syn-pronouns, to being possible to use only as Ref-pronouns. The new pronoun, *den* (it.C) ‘it’, was a Syn-pronoun, i.e. a pronoun that makes reference to the preceding (common gender) noun phrase. However, a complicating factor is that *den* can also be used as a Ref-pronoun. (This was shown in chapter 3, this volume.)

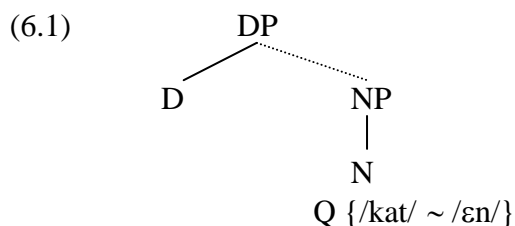
In order to understand this development it is not enough to study the pronouns, we will have to take a careful look at the antecedents and antecedent-triggers, in particular noun phrases in definite form, which underwent important phonological changes in Old Swedish and Early Modern Swedish.

---

<sup>64</sup> Until sometime around the end of the 1900s the pronoun *han* ‘he’ could be used for generic reference to humans in general, but this use has practically disappeared, for socio-political reasons. In chapter 3 I argued that the increased use of *den* as a generic pronoun with animate reference (and when the natural gender of the referent is unknown or irrelevant) is a change in use, crucially not the result of a change in the feature setup of the pronoun *den*.

## 6.2 Phonological and morphological changes in definite pronouns

The leading idea in the previous chapters is that formal gender in modern Swedish is morphophonology. Hence, common gender (on nouns) is defined as the morphological pieces /n/, /ɛn/, or /Ø/, and neuter is /t/, /ɛt/, or /Ø/ (the alternatives being allomorphs, used in different contexts, crucially /Ø/ being used on adjectives). These pieces of morphophonology are inserted on a noun together with the phonological features of the root. (6.1) shows the (initial) structure of the noun *katt-en* (cat-DEF.C) ‘the cat’.



It was proposed above that formal gender phonology is taken into use, if needed, in order to make other morphological categories visible, for example definiteness and indefiniteness on nouns. If this is a correct assumption, we should be able to characterize formal gender in Old Swedish in the same way, namely in terms of phonology.

When it comes to Old Swedish, the idea that formal gender is phonology is complicated by the fact that nouns were inflected for case too; it is not always easy to tease the expression of these two features apart. The path from a three-way gender system with case marking on nouns to the present-day system is thus a development from a situation where the definiteness ending on a noun was a portmanteau morpheme, simultaneously expressing case and definiteness, sometimes also number, to a situation where the ending expresses solely definiteness (and number).

For the sake of simplicity we shall concentrate on the forms in the singular – the difference in gender is marginal in the plural forms. We shall start out by looking at the nominative and accusative forms, leaving the dative aside, to begin with. The genitive form is not of interest here, since the genitive marker was reanalyzed as a clitic element at an early stage in the development, a process that is described in detail in Delsing (1991) and Norde (1997).

According to Wessén (1965 [1992], part 1, 137, 141), the nominative, masculine form *fiskr-inn* ‘the fish’ disappeared and was replaced by the form *fiskin(n)* around 1400. The reason for this change is not of immediate importance for the analysis proposed here, but it is



presumably related to the change of the status of *-in(n)*, which originally is assumed to have been a demonstrative pronoun, which was reanalyzed as a clitic, finally ending up as inflection. At the stage, where *-in(n)* had become inflection, it is fully expected that word-internal agreement, such as the *-r-* in *fiskrinn* ‘the fish’ (see Table 6.1), had disappeared. Feminine forms, such as *färþ-ina* ‘the trip’, were replaced by *färþ-in* around 1450. This means that the accusative and the nominative had collapsed at this point – though the masculine and the feminine forms were still distinct. (For neuter nouns, such as *barn* ‘child’, the nominative and accusative forms were homophonous to begin with, so they are not important for the discussion.)

Equally as important as the collapse between the nominative and the accusative forms is the one between the ending of masculine and feminine nouns in their definite form. This is what happened in the next step. Wessén (1965 [1992], part 1, 146) notes that the definite suffix for masculine and feminine nouns was “neutralized” around 1500 in the written language, as well as in the spoken language of “educated people”. This means that the ending of the masculine *fiskin* ‘the fish’ and the feminine *färþ-in* ‘the trip’ had become identical in the nominative and the accusative case. The reason for this change is not crucial. Insofar as we accept paradigm leveling to be a driving force in language change, this is presumably what happened.

The stages in the development are shown below, exemplified with the singular definite forms of the masculine *fisk* ‘fish’, the feminine *färþ* ‘trip’, and the neuter *hus* ‘house’.

|                  |     |                         |                      |                      |
|------------------|-----|-------------------------|----------------------|----------------------|
| Stage 1          | Nom | Masc<br><i>fiskrinn</i> | Fem<br><i>färþin</i> | Neut<br><i>husit</i> |
|                  | Acc | <i>fiskin</i>           | <i>färþina</i>       | <i>husit</i>         |
| Stage 2, c. 1450 | Nom | Masc<br><i>fiskinn</i>  | Fem<br><i>färþin</i> | Neut<br><i>husit</i> |
|                  | Acc | <i>fiskin</i>           | <i>färþin</i>        | <i>husit</i>         |
| Stage 3, c. 1500 | Nom | Masc<br><i>fiskin</i>   | Fem<br><i>färþin</i> | Neut<br><i>husit</i> |
|                  | Acc | <i>fiskin</i>           | <i>färþin</i>        | <i>husit</i>         |

Table 6.4. The changes in the form of definite nouns, strong declension.

For the weak declension the difference between the nominative and the accusative forms seems to have disappeared a bit later, in the majority of the dialects in the Early Modern Swedish period, around 1600. The pattern of change was slightly different for the weak

nouns. In some dialects, the (old) accusative form became the common form, in others the nominative one. In yet other areas the accusative form became the common form for nouns denoting inanimate entities, whereas the nominative form became the common form for animate nouns. The details of this is not crucial for the points I make here; what is important is that the nominative and the accusative forms eventually collapsed.

The changes described above gave rise to a situation where the nominative and the accusative forms of nouns were identical (in the singular), and there were no differences between the masculine and the feminine nouns. It could be tempting to say that the masculine *-inn*, as in *fiskinn* ‘the fish’ was replaced by the feminine *-in*, as in *färpin* ‘the trip’, but this does not seem to be the correct conclusion, since the transition from the form *fiskinn* to *fiskin* relates to a more general change in the syllable structure; the new pattern required that unstressed syllables be short, which implies that the coda of unstressed syllables no longer could contain long consonants. (In this book long consonants are represented by gemination.)

Naturally, the change described did not take place in all dialects at the same time. In some dialects a difference between the masculine and the feminine was retained; the masculine definite ending was *-en* in these dialects, and the feminine one was *-a* (for details, see Wessén 1965 [1992], 146):

|                                                  | masculine                                                                 | feminine                                                                    |
|--------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Written language, “educated”<br>spoken language: | <i>fisken</i> ‘the fish’, <i>dagen</i> ‘the day’, <i>foten</i> ‘the foot’ | <i>solen</i> ‘the sun’, <i>natten</i> ‘the night’, <i>handen</i> ‘the hand’ |
| Dialects:                                        | <i>fisken</i> , <i>dagen</i> , <i>foten</i>                               | <i>sola</i> , <i>natta</i> , <i>hanna</i>                                   |

Table 6.5. Nominative and accusative forms of masculine and feminine nouns in standard Early Modern Swedish.

The three-way gender system lasted much longer in the dialects – it is even still well and alive in some dialects in contemporary Swedish. The gender reduction from three grammatical genders to two, and the introduction of *den* was a process that seems to have started in the “upper layers”, i.e. among the educated people in the higher classes. This is pointed out by Tegnér on his study of gender in Swedish:

In the beginning *den* appears as an aristocratic word. It belongs to the language of the government officials and it spreads at the earliest stage among high officials and the nobility of the aristocratic world. In this context it is often used in the royal secretariat (Tegnér 1925 [1964], 141, my translation).

As pointed out above, it has been suggested that the introduction of the pronoun *den* (it.C) ‘it’ was due to Danish influence (Tegnér 1925 [1964], 167); contact between the Scandinavian languages in the upper classes was intense during the period. Regardless of the trigger for the gender reduction, the important point is that the use of *han* ‘he/it’ and *hon* ‘she/it’ as Syn-pronouns – pronouns that link back to noun phrases, the endings of which were identical – is probably possible for a while, but not in the long run. The confusion as to the “correct” gender of nouns is evidenced by a discussion reported in Tegnér 1925 [1964]. Tegnér noted, for instance (p. 27), that few speakers of his contemporary Swedish assigned different genders to the synonyms *mullvad* ‘mole’ and *mullsork* ‘mole’, which they should have, had they followed the traditional pattern. Without any overt markers on a noun/noun phrase in definite form, a distinction as to what Syn-pronoun can be used seems not to be possible to retain in the long run, it would presumably be too difficult for children to learn and remember.

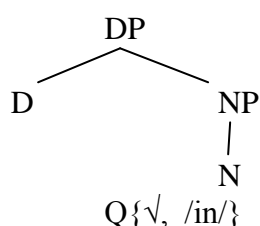
The changes in the gender system are most probably related to changes in the morphology more generally. Delsing (2013) discusses the collapse of the case system in Swedish, which, according to him, took place in two steps, “the small catastrophe” and “the big catastrophe”. In his view, the major external cause of the changes was the influence of Low German in Sweden at this time.

### 6.3 The structure of pronouns

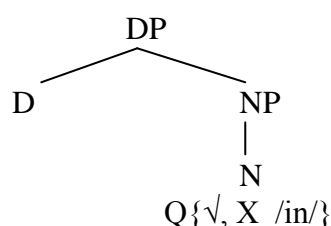
It was proposed in chapter 3 that Syn-pronouns have the same basic structure as a definite pronoun with the same formal gender and number. The crucial difference between a definite noun such as *fisk-en* (fish- DEF.SING.C) ‘the fish’ and *den* (it.C) is that the noun has root phonology, /fisk/, which the pronoun lacks. (The initial *d-* could be analyzed as a phonological support morpheme, which serves as host for the suffix, as suggested in Cardinaletti & Starke (1999).) As we have seen, the definite form of feminine and masculine nouns conflated around 1500, and the nominative and accusative forms became indistinct. In a strong version of the story, we expect the collapse of the form of the suffixed definite article to immediately trigger a reanalysis of the formal gender system in such a way that it is no longer possible to associate certain nouns with the Syn-pronoun *han* and others with *hon* by virtue of identity in the inflectional parts. However, according to a weaker version of the story

we may assume that speakers at Stage 3 in Table 6.4 above may have interpreted the new situation in such a way that the masculine gender phonology /n/, /ɛn/ and the feminine gender phonology /n/, /ɛn/ were two distinct but accidentally homophonous pieces of gender phonology. Evidence from other parts of the linguistic system could motivate a distinction between the classes of masculine and feminine nouns, and the similarity in form between, for example, the masculine *foten* ‘the foot’ or *fisken* ‘the fish’ and the feminine *handen* ‘the hand’ or *färpin/färpen* ‘the trip’ would, according to such a view, be accidental. Definite nouns had different forms in the dative case, which would motivate this distinction. The difference in morphology that would show up only in cases other than nominative/accusative could be formalized by the presence of a feature, X in (6.2) below. Crucially this feature would be inert in the nominative and accusative, but giving rise to different forms, such as the dative masculine *anda-num* (spirit-MASC.DAT.SG) ‘the spirit’ and the dative feminine *vi-kunni* (week-FEM.DAT.SG) ‘the week’, as well as the dative masculine *fisk-inum* ‘to the fish’, which could be compared to the dative feminine *hand-inni* ‘to the hand’.

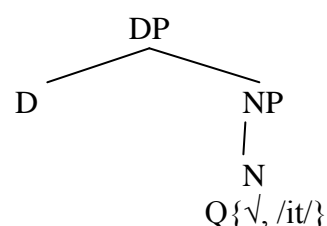
(6.2) a. Masculine noun



b. Feminine noun



c. Neuter noun

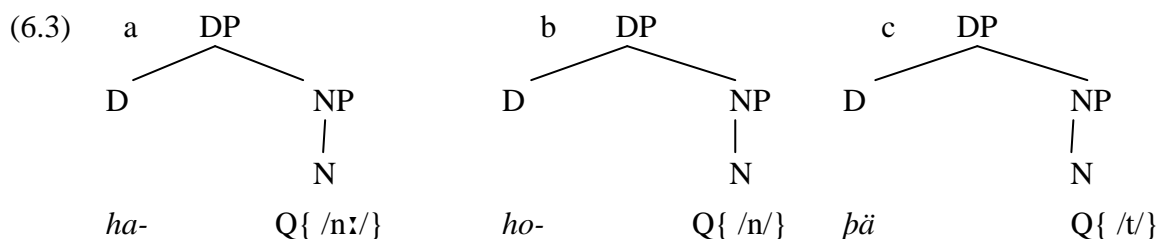


The assumption that the formal gender is generally /in/ and /it/ in (6.2) is due to the assumption that nouns in the nominative and the accusative did not in fact have morphological case. The special dative forms were those that were provided with morphological case.

Not until the particular feminine forms in the dative case disappeared (or became so few that they could be viewed as lexical exceptions) did the last overt evidence that masculine and feminine nouns were of different kinds vanish. This process presumably took place word-by-word, meaning that fewer and fewer words were assumed to belong to the group marked X in (6.2b).

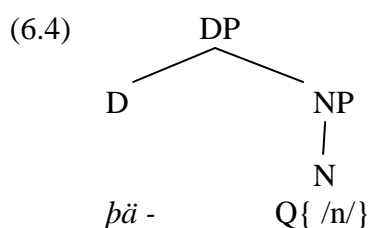
Recall the idea that the third person Syn-pronouns have the same structure as the corresponding nouns in their definite forms. This means that the basic structure of the Syn-pronouns *hann* ‘he’ *hon* ‘she’, and *pät* ‘it’ in Old Swedish (what in traditional grammar are

called pronouns that refer to inanimate nouns/noun phrases) had the basic structure shown in (6.3) below.



In a DM framework we would say that the allomorph *ha-* is inserted in D the context {/n:/}, *ho-* in the context of {/n/} and *pä* in the context of {/t/}. Eventually, the number of (feminine) nouns with a special form in the dative, for example *världinne* (world.DAT) ‘the world’ and *menniskone* (person.DAT) ‘the person’, were probably not assumed to represent a special group, but were considered lexical exceptions.

When there was no longer any possibility to distinguish the definite forms of (formerly) masculine and (formerly) feminine nouns in the definite forms in any of the cases, we could have expected a situation where either *han* or *hon* would “take over” as Syn-pronouns used for reference to both formerly masculine and feminine noun phrases (including noun phrases referring to inanimates). This does not seem to have happened in Swedish in general, although Sandström notices such tendencies in the more recent gender reduction in some dialects of Finland Swedish. (More specifically, in this variety of Swedish, the pronoun *han* ‘he’ took over as an anaphoric pronoun for both (formerly) masculine and feminine antecedents (see Sandström 2010, 374).) Instead a new Syn-pronoun, *den*, presumably borrowed from Danish, was taken into use. From a functional point of view, *den* must have solved a problem. Speakers did not have to memorize which nouns had and which ones did not have the X marking in (6.2). In fact, the pronouns in (6.2a) and (6.2b) disappeared, and their role was taken over by the pronoun shown in (6.4) below.



In her dissertation, Sandström shows that the use of *han/hon* vs. *den* had important sociolinguistic repercussions in the history of Finland Swedish. Once speakers were given a

choice between the old system – *han/hon/det* or *den/det* as Syn-pronouns, i.e. for nouns denoting inanimate referents – the use of the old system became a dialect marker (“*dialektmarkör*”). The use of *den* thus became the prestigious form (much like what had happened earlier in Sweden Swedish, as pointed out above).

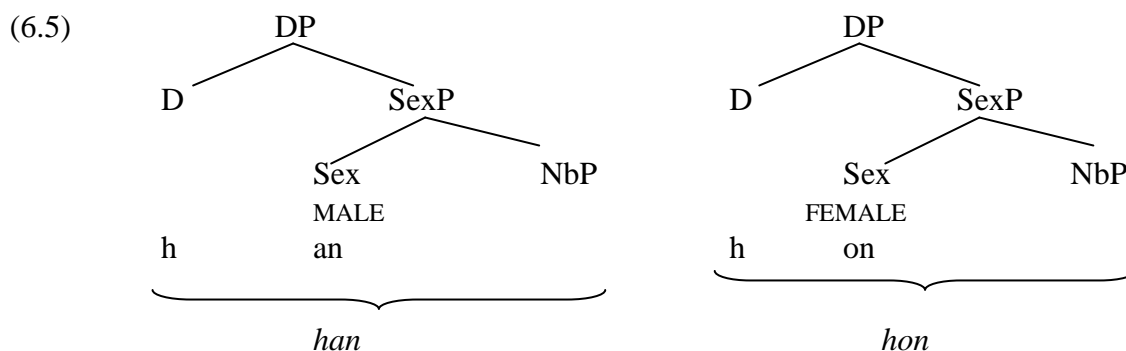
According to Sandström, the change in the system in Finland Swedish, which took place much later, around 1900, started with a change in the pronominal system. It was followed by a conflation of the definite articles of masculine and feminine nouns (p. 374). Sandström’s assumption that there is a close connection between the definite article of nouns and the corresponding Syn-pronouns in Finland Swedish confirms the analysis proposed in this chapter. Her suggestion that the change started within the pronominal system is a bit surprising, though, but can be accommodated in the proposed system. Today, speakers of dialects are seldom monodialectal. This means that the speakers of a dialect are familiar with the use of *den* as Syn-pronoun. Hence, the use of *den* as a Syn-pronoun (i.e. for nouns denoting inanimate referents) can be imported from the standard variety of the language. (From a theoretical point of view this would be very similar to the assumed situation around 1500, when *den* was borrowed from Danish.) Once *den* is imported, the use of which is motivated by semantics, the difference between masculine and feminine nouns in their definite form can either disappear or remain.<sup>65</sup> In other words, whether or not the trigger for the change lies in the pronominal system, for instance through the introduction of a new pronoun with high prestige, or in phonological changes in the determiner system of the noun phrase, is not crucial for the points made in this chapter.

It is important to remember that *han* ‘he’ and *hon* ‘she’ were used as Ref-pronouns in Old Swedish too. In this use they contained what I term a SexP in their functional sequence (see chapter 3). We have no reason to assume that such pronouns contain any NP layer in their structure, since they do not refer back to nouns by means of formal gender. (See chapter 3 for arguments.)<sup>66</sup>

---

<sup>65</sup> There is nothing in the system that would prevent dialects from having a difference between masculine and feminine forms, such as *foten* ‘the foot’ and *handa* ‘the hand’, and yet use pronouns such as *den* for anaphoric reference. According to Marit Julien (p.c.) this situation is found in many Norwegian dialects.

<sup>66</sup> The reason why we do not have to assume any NP layer is that this layer hosts phonological features related to nouns, including the features of formal gender. As shown in chapter 3, the pronouns *han* ‘he’ and *hon* ‘she’ do not have any formal gender feature at all.



As we see, the Ref-pronouns *han* ‘he’ and *hon* ‘she’ had exactly the same structure in Old Swedish as they have in contemporary Swedish.

## 6.4 The change from the point of view of the pronominal forms

Let us now take a look at the pronouns from the point of view of the pronominal forms. In the old system *han*, *hon*, and *thät* could be used both as Syn-pronouns and as Ref-pronouns:

| Ref-pronoun                                                |             | Syn-pronoun                                                            |
|------------------------------------------------------------|-------------|------------------------------------------------------------------------|
| Links to a MALE non-linguistic referent in the discourse   | <i>han</i>  | Links to a nominal element in the linguistic discourse, typically a DP |
| Links to a FEMALE non-linguistic referent in the discourse | <i>hon</i>  | Links to a nominal element in the linguistic discourse, typically a DP |
| Links to an element in the non-linguistic discourse        | <i>thät</i> | Links to a nominal element in the linguistic discourse, typically a DP |

Table 6.6. The third person pronouns in Old Swedish.

In actual use, the pronouns *han* ‘he’ and *hon* ‘she’ could well have been interpreted as either Ref-pronouns or Syn-pronouns, meaning that the pronoun *han* ‘he’ used for a discourse referent previously referred to as *mannin* ‘the man’, would simultaneously refer directly to the discourse referent (Ref-linking) and to the linguistic anaphor, the DP (Syn-linking).

In the new system the pronouns *han* ‘he’ and *hon* ‘she’ could no longer be used as Syn-pronouns, only as Ref-pronouns.

| Ref-pronoun                                                  |            | Syn-pronoun                                                            |
|--------------------------------------------------------------|------------|------------------------------------------------------------------------|
| Links to a MALE non-linguistic referent in the discourse     | <i>han</i> | –                                                                      |
| Links to a FEMALE non-linguistic referent in the discourse   | <i>hon</i> | –                                                                      |
| Links to a countable non-linguistic element in the discourse | <i>den</i> | Links to a nominal linguistic element in the discourse, typically a DP |
| Links to a non-linguistic element in the discourse           | <i>det</i> | Links to a nominal linguistic element in the discourse, typically a DP |

Table 7. The third person pronouns in Modern Swedish.

The change in the pronominal system could be described as a case of semanticization – the pronouns *han* ‘he’ and *hon* ‘she’ become purely semantic.

## 6.5 Why do gender systems change?

The Swedish case is an illustration of a more general observation, that gender systems are quite often unstable (Corbett 1991, ch. 10). The question is then: why are they unstable?

Let us assume that the old Swedish system had a semantic core, which Corbett (1991, 307) suggests holds for all gender systems. However, the gender assignment of new nouns can take place in two ways, by virtue of the meaning or by virtue of form. A striking example of this fact is that the noun *pappa* ‘daddy’, borrowed from French, is a weak feminine, due to a similarity in form with nouns such as *mamma* ‘mommy’, *flicka* ‘girl’, *kvinna* ‘woman’, and *gumma* ‘old woman’.<sup>67</sup> As time passes there will be more and more nouns that have received their formal gender by virtue of similarity in form, which in turn weakens the semantic base for the formal gender system and brings tension into the system. (Corbett mentions derivational suffixes in particular as a “destabilizing” factor (1991, 318).) However, it seems possible for a system to contain tension if the formal gender distinction is clearly perceivable within the noun phrase, i.e. on the article, or, more specifically, on the form of the definite article. (The background assumption is that a Syn-pronoun has the same basic structure as the corresponding DP.) However, if phonological changes erase the difference in form between

<sup>67</sup> The absolute majority of nouns ending in an unstressed *-a* were weak feminines, with *-or* as the plural suffix: *flicka* ‘girl’ – *flickor* ‘girls’. The exceptions are a few neuter nouns, such as *hjärta* ‘heart’ – *hjärtan* ‘hearts’ and *öga* ‘eye’ – *ögon* ‘eyes’.



masculine and feminine nouns (in their definite form) the very basis for formal gender split disappears, and the system will eventually reach a point where the strain on language users to remember the form of each noun – with little or no evidence from other parts of the paradigm – means that the system cannot be upheld any more. This type of scenario is described for different languages by Corbett (1991, ch 10.2.3). In this sense nouns in their definite forms and Syn-pronouns are in fact communicating vessels. Formal gender IS morphophonology, and as soon as phonological changes start to affect either of the two, we expect changes in the system to take place.

In Swedish the gender reduction seems to have started in the nominal system. According to Sandström (2010), the change in Finland Swedish started in the pronominal system. With the proposed analysis there is no required ordering of these factors, in particular since the introduction of a new prestigious pronominal form *den* is a “wild card”, the use of which is not forced by language-internal factors, but rather a possibility that language users are offered from the outside the language system itself. There is nothing blocking the use of *den* for inanimates (i.e. as a Syn-pronoun) also in language varieties that do make a distinction between feminine and masculine nouns in their definite form, cf. the masculine *fot-in* ‘the foot’ vs. the feminine *hand-a* ‘the hand’, as pointed out above.

As we have seen in chapter 3, the new system hosts tension too, since the pronoun *den* (it.C) ‘it’ does not have the value INANIMATE or the like; it is just unmarked for the value ANIMATE. In Swedish, sociolinguistic factors open for a change of the system, where the pronoun *den* is more commonly used for animate reference, where the natural sex of the referent is unknown or irrelevant. The need for such a pronoun is due to socio-political factors; up till around 2000 it was politically acceptable to use the pronoun *han* ‘he’ in such contexts; this is not possible any more. It remains to be seen whether the use of *den* will be fully accepted as a Ref-pronoun, which it is not yet, at least not in all registers, and not by all age groups. There have even been attempts to introduce a new, politically correct, semantically based sex-neutral pronoun, *hen* or *hän*, modeled on the Finnish pronoun *hän* ‘he/she’. It remains to be seen how this type of language planning, which is not a spontaneous process where a high-prestige form outruns a low-prestige one, will succeed.



## 7. A brief look at other gender systems

In the previous chapters I have discussed the gender systems in Old and Modern Swedish, proposing a model where a distinction is made between lexical gender, formal gender, and semantic gender. Pronouns may express either a formal gender, in which case they are Syn-pronouns, or semantic gender, in which case they are Ref-pronouns. A Ref-pronoun contains functional projections that corresponds to the meaning conveyed by the pronoun, for example feminine for *hon* ‘she’ and masculine for *han* ‘he’. These functional projections/features are absent in nouns, even though the meaning is or includes that of ‘male’ and ‘female’. Furthermore, I have suggested that the structure of a Syn-pronoun is identical to the structure of a definite noun, except for the root phonology.

If the proposed account is to be of theoretical significance, it must be shown that the basic properties of the proposed model could be applied to other languages too. The purpose of this chapter is to show that this holds true for at least one related language, German. In 7.2 I will comment briefly on French and English.

### 7.1 German – a three-way formal gender system

German is a language with a three-gender system which in many ways resembles that of Old Swedish. The main difference is that the definite article in German is prenominal:

- (7.1)
- |   |              |              |
|---|--------------|--------------|
| a | <i>der</i>   | <i>Wagen</i> |
|   | DEF.MASC.NOM | car          |
|   | ‘the car’    |              |
| b | <i>die</i>   | <i>Blume</i> |
|   | DEF.FEM.NOM  | flower       |
|   | ‘the flower’ |              |
| c | <i>das</i>   | <i>Haus</i>  |
|   | DEF.NEUT.NOM | HOUSE        |
|   | ‘the house’  |              |

As the examples indicate, formal gender in German is arbitrary to the same degree as in Contemporary and Old Swedish. Examples, such as *Mädchen* ‘girl’, are often discussed in the literature; *Mädchen* is formally a neuter gender noun (just like nouns ending in *-chen* in general); nevertheless it is often “pronominalized” by the feminine pronoun *sie* ‘she’. Within the proposed system this means that either a Syn-pronoun, *es* ‘it’, may be used, in which case

reference goes to the noun phrase *das Mädchen/ein Mädchen*, or a Ref-pronoun, *sie* ‘she’. In the latter case the antecedent would be a non-linguistic entity, a discourse entity.

The basic properties of the German system of personal pronouns (Syn-pronouns) are shown in Table 1 below, together with noun phrases in their definite form:

|            | Masculine                    |            | Feminine                         |            | Neuter                         |            |
|------------|------------------------------|------------|----------------------------------|------------|--------------------------------|------------|
|            | noun                         | pronoun    | noun                             | pronoun    | noun                           | pronoun    |
| Nominative | <i>der Mann</i><br>‘the man’ | <i>er</i>  | <i>die Blume</i><br>‘the flower’ | <i>sie</i> | <i>das Haus</i><br>‘the house’ | <i>es</i>  |
| Accusative | <i>den Mann</i>              | <i>ihn</i> | <i>die Blume</i>                 | <i>sie</i> | <i>das Haus</i>                | <i>es</i>  |
| Dative     | <i>dem Mann</i>              | <i>ihm</i> | <i>der Blume</i>                 | <i>ihr</i> | <i>dem Haus</i>                | <i>ihm</i> |

Table 7.1. German nouns in nominative, accusative and dative, and the corresponding Syn-pronouns.

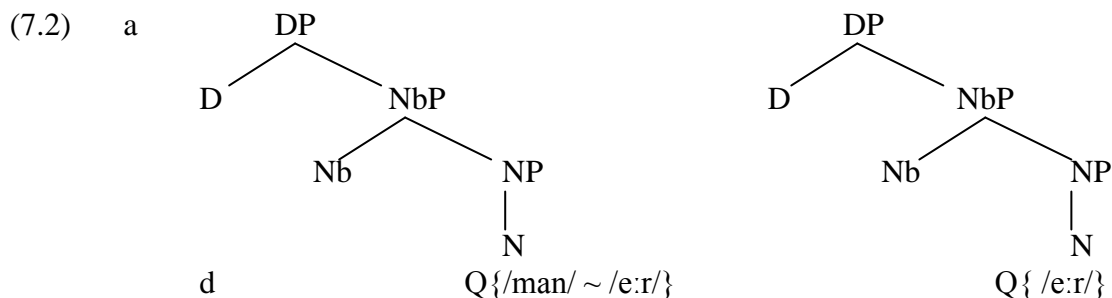
As pointed out above, the prediction is that the pronouns in Table 7.1 have the same basic structure as the corresponding definite noun phrase. Crucially the structure of a personal pronoun was assumed to be identical to the corresponding noun, minus the phonological features of the root. The question is whether this could be true for German.

First of all, all the definite articles in German begin with /d/. In chapter 3 I suggested that the initial /d/ of the pronominal article in the pronominal definite article in noun phrases in Swedish, such as *den gröna bilen* ‘the red car’, is a “support morpheme”. Assuming that this is the case for German as well, what we should get if we subtract the /d/ element is an expression of number, gender and case. In other words, the prediction is thus that the pronoun and the article minus /d/ should be identical:

|            | Masculine    |            | Feminine     |            | Neuter       |            |
|------------|--------------|------------|--------------|------------|--------------|------------|
|            | article      | pronoun    | article      | pronoun    | article      | pronoun    |
| Nominative | <i>(d)er</i> | <i>er</i>  | <i>(d)ie</i> | <i>sie</i> | <i>(d)as</i> | <i>es</i>  |
| Accusative | <i>(d)en</i> | <i>ihn</i> | <i>(d)ie</i> | <i>sie</i> | <i>(d)as</i> | <i>es</i>  |
| Dative     | <i>(d)em</i> | <i>ihm</i> | <i>(d)er</i> | <i>ihr</i> | <i>(d)em</i> | <i>ihm</i> |

Table 7.2. The pronominal articles in German.

The structure of the DP *der Mann* (DEF.MASC.NOM man) ‘the man’ and the pronoun *er* (DEF.MASC.NOM) ‘he, it’ is shown in (7.2):

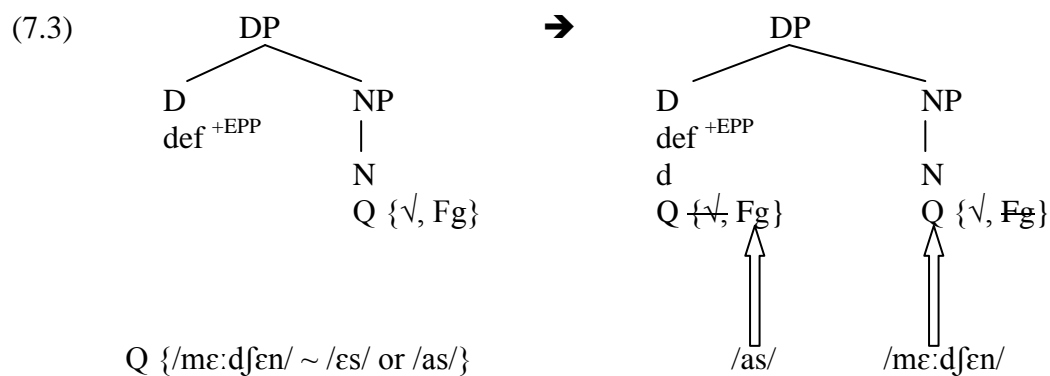


For a masculine noun in the singular nominative, such as *der Mann* ‘the man’, the prediction seems to hold; we may assume that /e:r/ moves up to D in (7.2b). However, the situation is not quite as straightforward in other cases. In particular, the vowel quality is not always identical, for instance it is /e:/ in MASCULINE, ACCUSATIVE (*d*)*en* but /i:/ in the corresponding pronoun *i**hn*. The feminine the pronoun *sie* ‘she’ starts with a consonant /s/, an element that is absent in the article (*d*)*ie*. The question is then as follows: do these differences falsify the proposed hypothesis, which, in short, states that a noun in its definite form has the same structure as the corresponding personal pronoun, minus root phonology? In my view this is not obviously the case. Phonological paradigms and systems are hardly ever mathematically perfect, so the question should instead be whether the similarity in the phonological spell-out of two elements is good enough. My answer is that, for German, this seems to be the case. In order to get a deeper understanding, we will take a closer look at the notion of morphemes.

Ideally, morphemes are thought of as elements that line up in a word, one after the other, like pearls on a string. However, not all multimorphemic words are organized in this way. Quite often phonological processes have obscured the boundaries between morphemes. For instance, in a word like *småläanning* ‘person from Småland’, we recognize the bimorphemic *Småland* (lit. ‘small’ + ‘land’), and the derivational suffix *-ing*, even though *nd* in *Småland* corresponds to *nn* in *småläanning* and *a* in *-land* to *ä*, in *-länn*, the latter probably due to the influence of the sound /i/; it is, in other words (historically it is an instance of *i*-umlaut). The conclusion is that the noun *småläanning* has three morphemes, and the middle one, *länn*, corresponds to, *land*. The two exponents, *länn* and *land*, do not have identical forms, but the similarity is good enough to make it possible for language users to identify the two as being

‘the same’.<sup>68</sup> In a similar way, the plural form *rötter* ‘roots’ contains the plural marker *-er*, as in *bild* ‘picture’ – *bild-er* (picture-PL) ‘pictures’, but plurality has “spilled over” to the root vowel and caused umlaut *o* → *ö*. (The singular form is *rot* ‘root’.) The point is that it can sometimes be quite easy to count the number of morphemes in a word and to associate them with other morphemes in other words, but nevertheless difficult to pinpoint the exact boundary between the morphemes. Surface adjustment rules may give one morpheme a certain shape in one context and another shape in another context. If we apply this line of reasoning we may assume that the similarities between the German determiner *dem* and the corresponding pronoun *ihm* as well as between the determiner *die* and the pronoun *sie* are good enough to make language users realize that the pairs contain the same morpheme – in other words different allomorphs – which, within the proposed analysis. The morpheme that follows the initial consonant in the pronouns is identical to the formal gender morpheme in combination with number and case. We may thus conclude that the hypothesis about identical structures for definite nouns and the corresponding Syn-pronouns seems to hold for German too.

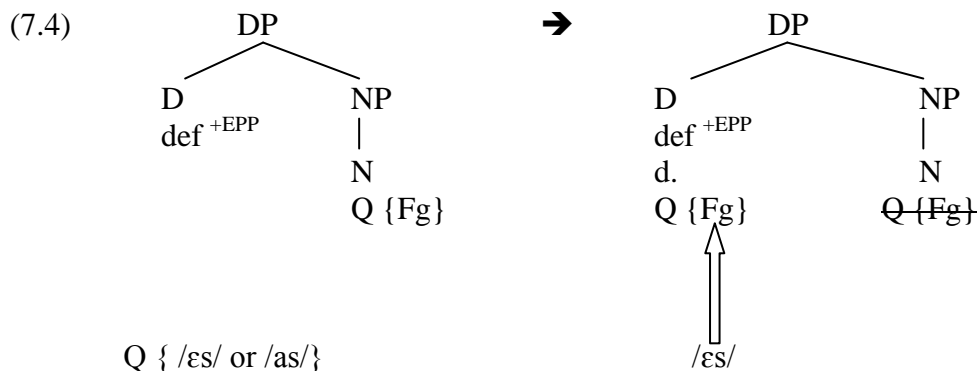
Corbett uses the term *hybrid nouns* for nouns that have one formal gender and a different semantic gender (Corbett 1991, 183). This very term has had a great impact on the discussion and the understanding of genders, so the concept deserves to be scrutinized. Within the proposed framework a “hybrid” noun, such as *das Mädchen* (DEF.N girl) ‘the girl’, has the following basic derivation.



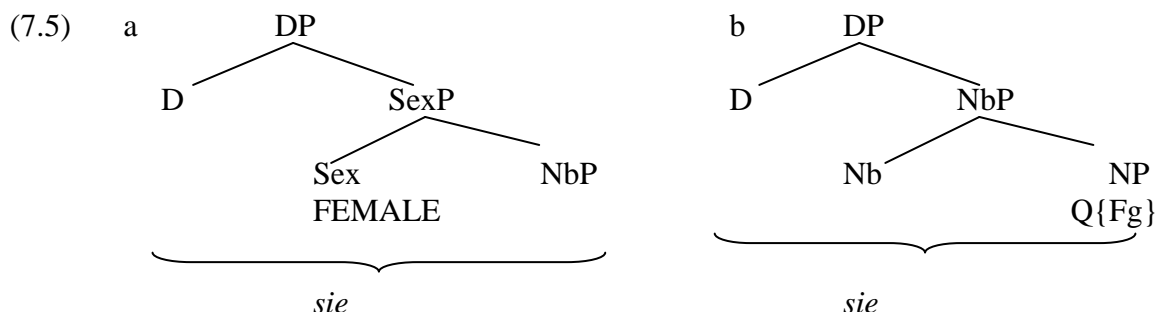
The neuter Syn-pronoun *es* ‘it’ has basically the same structure as *das Mädchen*, the difference being that only the formal gender feature is merged in **N** (corresponding to **Q**

<sup>68</sup> Whether or not the variation between *lann* and *länn* is viewed as an instance of stem alternation or *länn* is due to surface adjustment rules is not crucial for the purposes here.

{Vowel+s}. When no root is merged, the elements in D, which is definiteness + the formal gender matrix, which is /Vowel + s/, is spelled out as *es*:



Now, let us take a look at the pronoun *sie* ‘she, it’. In a parallel to Old Swedish *hon* ‘she, it’, the feminine pronoun *sie* ‘she’ corresponds to two structures, one in which feminine gender is hosted in a SexP (hence is interpretable, and carries a meaning, ‘female’) and one in which formal gender is merged in N, in which case it does not carry a meaning. The first instance of *sie* is a Ref-pronoun (see (7.5a)), the second a Syn-pronoun (see (7.5b)). The basic properties of the two structures are shown below.



The Ref-pronoun in (7.5a) occurs in contexts where the referent is female, regardless of the presence or absence of a feminine gender noun in the context. The structure in (7.5b) shows the structure of *sie* ‘she’ used as a Syn-pronoun, when the reference is a DP, for instance *die Blume* ‘the flower’, regardless of any semantics associated with this DP. In actual use it is often impossible to tell whether (7.5a) or (7.5b) is used, since the antecedent could be both the DP and a non-linguistic discourse referent. An example is given in (7.6):

- (7.6) *Was hat die Dame gekauft? Sie trägt ein sehr schweres Paket.*  
 what has DEF.FEM lady bought. FEM.SG carries a very heavy package  
 ‘Whatever has this lady bought? She is carrying a very heavy package.’

*Sie* in the second clause could either refer to the DP *die Dame* ‘the lady’ or to a female who is coindexed with the referent to which *die Dame* refers. For pronouns referring to humans this scenario seems to be the unmarked one.

From the discussion in this section we can gather that a hybrid noun is a noun where reference by means of a Syn-pronoun and a Ref-pronoun would require different pronominal forms. Consequently, it is not the case that hybrid nouns have a double gender classification in any sense of the word; such nouns have just one formal gender classification. Ultimately the term hybrid noun is a consequence of the fact that grammarians have chosen to term the formal genders masculine, feminine and neuter. Had these genders been given more neutral names, such as Alpha, Beta, and Theta, or Gender 1, Gender 2, Gender 3, hybrid nouns would probably not have been very interesting to linguists. A system according to which reference could go to a linguistic entity, usually a DP, or to a non-linguistic one, would have been much easier to perceive.

## 5.2 Some notes on English and French

English is of Germanic origin, but, as opposed to the other Germanic languages, this language does not display any distinction in formal gender. However, within the Ref-pronoun system English makes an interesting distinction between *that* and *it*. Consider (7.7):

- (7.7) a *John is sick. That’s too bad.*  
b *John is sick. It’s too bad (that John is sick).*

According to my informants, the use of *that* is strongly preferred when reference is made to the content of a clause, whereas *it* has a strong anticipatory bias. The pronoun *it* is also used when reference is made to DPs:

- (7.8) a *John spilled wine. It was ruby red, so it damaged his shirt completely.*  
b *Mary detests John’s collecting old shoes. It takes too much time, in her view.*  
c *I love lime green. It gleams in the twilight.*

On the basis of the examples above, we cannot conclude that English *it* is a Syn-pronoun, but we may conclude that there is a syntactic link between *it* and the noun phrase. I propose that this link goes via the determiner system, i.e. that the D head of *it* links to the D head of the DPs *wine*, *collecting old shoes*, and *lime green* in (7.8).



A similar state of affair seems to hold for French, where *il/elle* ‘he/she’ seems to be used for Syn-linking, whereas *ce* ‘it’ is used as a Ref-pronoun; Hence, it seems as though the same difference as the one between *den* (it.C) ‘it’ and *det* (it.N) ‘it’ holds between *il/elle* and *ce* in French. (See also chapter 3.) Consider first the Swedish sentence: The context is A and B looking at a small tree. *Träd* ‘tree’ is a neuter noun in Swedish.

- (7.9) a *Den var vacker!*  
           it.C be.PST beautiful.C  
           ‘It’s beautiful!’
- b *Det var vackert!*  
           it.N be.PST beautiful-N  
           ‘It’s beautiful!’

The corresponding sentences in French are given below:

- (7.10) a *Il est beau!*  
           he/it is beautiful  
           ‘It’s beautiful.’
- b *C’est beau!*  
           it.is beautiful.  
           ‘It’s beautiful’

The correspondence between English *it* and French *il/elle*, as well as between English *that* and French *ce*, is presumably more complicated than what is hinted at here, but this chapter is not the proper place for a detailed analysis of English or French (or German), so a more thorough analysis will be left to future research. The approach seems promising, though.

A problem that has to be addressed is how to account for the choice of pronoun in French when there is no obvious linguistic antecedent (for instance in situations where a deictic pronoun is used). Consider the following example from Bosch 1986, 72):

- (7.11) a Context: Watching a Frenchman trying to put a large table – *la table* (FEM) – into his car:  
           *Tu n’arriveras jamais a {la/\*le} faire entrer dans la*  
           You not’manage never to DEF.FEM/\*DEF.MASC make enter in DEF.FEM  
           *voiture*  
           car  
           ‘You will never manage to get it into the car.’

b Context: The same situation but with a desk – *le bureau* (MASC)):

*Tu n'arriveras jamais a {\*/la/le} faire entrer dans la.*  
 You not'manage never to \*DEF.FEM/DEF.MASC make enter in DEF.FEM

*voiture*

car

'You'll never manage to get it into the car.'

As (7.11a) shows, the feminine pronoun *la* has to be chosen in (7.11a) and the masculine *le* in (7.11b). Tasmowski & Verluyten (1982) point out examples of this kind to indicate that there is an "absentee antecedent" for every pronominal use, which linguistically "controls" the pronoun. Bosch argues that a speaker can make the choice between the feminine *la* and the masculine *le* in examples such as (7.11a) and (7.11b) by retrieving a basic level noun (see Rosch 1977) that corresponds to the perceived entity. The basic level noun in (7.11a) would be *table* 'table', which is feminine. This does not mean that there is a linguistic antecedent present in the context.

According to textbooks, French has a few pronouns that are considered to be neuter, in particular *ce*, which can be used for deictic reference. The example below is taken from Heurlin (1970, 29).

(7.12) *Quoi? Ce qui est là-bas.*  
 what? that which is over-there  
 'What? That which is over there.'

My interpretation of the assumption that French has neuter pronouns is that these pronouns are strictly deictic; reference does not go to a noun phrase antecedent. In this sense, French *ce*, as in (7.12) corresponds to the deictic pronoun *det* (it.N) 'it', in Swedish, as discussed in chapter 3. The main difference is that the Ref-pronoun *ce* 'it', has a special form in French, whereas *det* is homonymous to the Syn-pronoun *det* in Swedish.

## 7.3 Conclusion

Although sketchy, it has been shown in this chapter that the core part of the proposed model of gender, which makes a fundamental distinction between formal and semantic gender, can be applied to German, English, and French. It is not possible to solve all problems related to pronouns and gender in a study of this kind, but a small-scale investigation shows that the direction is promising.

## 8. Summary

The main point of this study is that we have to make a clear distinction between formal gender, semantic gender and lexical gender, in order to understand what gender is. These three distinctions cross-cut the categories nominal and pronominal gender, as well as the categories Ref-pronouns and Syn-pronouns, that is pronouns that refer back to non-linguistic entities and linguistic discourse entities, respectively.

Formal gender is inherent to nouns, which means that in a gender language, such as Swedish, each noun is by convention associated with a certain gender. In accordance with traditional grammar, I have assumed that formal gender is expressed on the suffixed determiner, and that it determines the form of agreement on modifiers. However, whereas the traditional view is that gender *triggers* agreement on modifiers (see, for instance, Hockett, 1958, 231), I have taken the opposite stand, launching the idea that gender is a piece of “auxiliary phonology” that is inherently associated to a noun, and that it that *lexicalizes* – provides phonological form – to morphological categories that need such a form. The reason why this is so is not always clear; it might simply be due to language-specific, strictly phonological wellformedness conditions. The categories that are made visible by formal gender carry a meaning, such as number, definiteness, countability, and animacy.

It is not always the case that gender lexicalizes meaningful categories in a direct and straightforward way. I have argued, for instance, that neuter may be inserted in categories that lack a number feature, which corresponds to the semantic notion of non-countability. The distinctions countable–non-countable stand in a privative opposition, which means that non-countability does not correspond to one single coherent category, but to categories that have only the absence of the feature countability in common. Non-countable categories are, for example, substance, mass, aggregated substance, property, and event; such categories are referred to by the neuter Ref-pronoun *det* (it.N) ‘it’.

Semantic gender represents a different dimension; it is a cognitive category – a category of thought, conveyed by linguistic resources, primarily pronouns. The third person personal pronouns *han* ‘he’ and *hon* ‘she’ express the categories male and female, respectively, and, when used by speakers, these pronouns provide a discourse antecedent with these semantic features. For instance, if the noun *person* ‘person’ is used in a sentence, a certain discourse entity is evoked, and if the pronoun *hon* ‘she’ is used in the next sentence, this pronoun does not refer to the DP *person* ‘person’; instead a new discourse entity is evoked, with which it is

coreferent. This amounts to saying that the pronoun *hon* ‘she’ adds more information about the discourse referent in question. Also *den* (it.C) ‘it’ and *det* (it.N) ‘it’ can be used as semantic pronouns, namely, when they do not refer back to DPs. The difference in meaning between *den* and *det*, in this use, is that *den* refers back to a countable entity, due to the presence of a number feature, which means that the referent is an entity that is bounded in space. When a speaker does not want to convey such a meaning, *det* is used. As a consequence, there is no negatively specified meaning component present in *den* or in *det*. The fact that *den* is used (predominantly) when reference is made to inanimates is due to inference: If a speaker wants to convey the meaning human, s/he would have been expected to use *han* ‘he’ or *hon* ‘she’ instead. Thus, the meaning ‘inanimate’ arises due to an implication.

Lexical gender has not been discussed in detail in this study. It is defined as a salient meaning component of a noun. For certain nouns, ‘male’ and ‘female’ are such salient meaning components, but this does not mean that the component in question corresponds to any morphosyntactic features. Consequently, to use the pronoun *hon* ‘she’ for a referent that is previously referred to by the noun *kung* ‘king’, is pragmatically ill formed, but not ungrammatical in a strict sense.

Another distinction that needs to be made divides the pronominal sphere. Basing my discussion on Bosch (1986, 1988) and Cornish (1986), I have argued that there are two types of pronouns, Syn-pronouns and Ref-pronouns. Syn-pronouns have the same structure as definite nouns, except for root phonology. A Syn-pronoun refers back to a linguistic entity, typically a DP, with which it shares at least one feature dimension. For instance, if a sentence contains the common gender noun *stol-en* (chair-DEF.C) ‘the chair’, and the following sentence the pronoun *den* (it.C) ‘it’, the pronoun *den* makes reference to the noun phrase itself. A typical Ref-pronoun, on the other hand, is a deictic pronoun – no linguistic entity is available. Importantly, the pronouns *hon* ‘she’ and *han* ‘he’ are Ref-pronouns too; these pronoun have no formal gender feature; hence, they cannot be used as Syn-pronouns.

The gender systems in the Mainland Scandinavian languages have undergone some major changes in the last 500 years; two of these have been discussed in this study. First of all, we have looked at the transition from a three-gender to a two-gender system in Swedish. Drawing on Wessén’s work I have argued that this change is ultimately due to an erosion of phonological distinctions (including a change in the syllable structure). These changes rendered the definite forms of masculine and feminine nouns identical. This, in turn,

impoverished the clues that made it possible for children to learn (and remember) which Syn-pronoun to use for (formerly) masculine and feminine nouns, *han* ‘it/he’ or *hon* ‘it/she’. In this situation, a new pronoun, *den* (it.C) ‘it’ was introduced. On the one hand this could be described as a semanticization of the gender system – in the new system the pronouns *han* ‘he’ and *hon* ‘she’ can only be used as Ref-pronouns, in other words to make reference to discourse entities. However, a new Syn-pronoun was introduced, *den*, which could made reference to linguistic entities, to common gender DPs, possible. As before, *han* ‘he’ and *hon* ‘she’ were used as Ref-pronouns. Crucially, the Syn-pronoun *den* does not carry any semantically relevant features, such as ‘inanimate’ or the like. Such a meaning is implied, since a speaker who chooses to use *den* automatically also chooses NOT to use the semantically meaningful animate pronouns *han* ‘he’ or *hon* ‘she’.

Phonological changes are often the ultimate trigger for morphological changes. This seems to hold true too for a change in the gender system that started in the southwestern corner of Denmark, in West Jutlandic, and which has spread and has had an impact on standard Danish and possibly also on standard Swedish too. When formal gender distinctions were lost in West Jutlandic, due to the erosion of phonological distinctions, semantics took over, and neuter became the gender used when a non-countable interpretation was intended. I have argued that this is not simply because people started to think in terms of semantics when phonology was lost. Behind this change seems to lie the multifunctional neuter pronoun *det*. As a demonstrative, *det* could be used both as an independent pronoun and as a modifying pronoun. As an independent element, a demonstrative *det* had basically the same meaning as in modern Danish and Swedish; it denoted non-countables or rather non-bounded entities. Importantly, such a denotation is not a question of ontology but reflects the intended meaning of the speakers. As a modifier, however, a demonstrative had to agree with the head noun in gender (and number) – like modifiers in general. When nominal inflection on the nouns eroded, the requirement that a modifying pronoun should agree with the head noun was weakened too, which, in turn, made it possible for the freer use of the independent demonstrative to be carried over to the modifier. In other words, the construction *det* + noun became possible to use for non-countables in general, since the head noun had no longer an inherent formal gender (Ringgaard 1971, 30–31). In this study, *det*, used in this way, is a classifier. Since nouns in West Jutlandic seem to lack inherent gender, and the use of the construction *det* + noun is obligatory when a non-countable interpretation is intended, I have

suggested that we may think of this variety of Danish as a classifier variety, instead of a gender variety.

Jutlandic in general does not have agreement on adjectives, but standard Danish has, and so does Swedish. I have argued that the core properties of the *det* + noun construction were taken over by standard Danish, with the important difference that the classifier *det* in this variety is phonologically null. However, the neuter gender of the classifier triggers agreement on a predicative adjective, giving rise to pancake sentences, such as (7.1):

- (7.1) *Pandekager er god-t, pandekager er sund-t*  
 Pancake(C).PL BE.PRS good-N, pancake(C).PL be.PRS healthy-N  
 ‘It’s good to have pancakes; it’s healthy to have pancakes.’

Intuitively, it makes sense that neuter can be expressed either on the predicative adjective (as in Swedish or standard Danish) or on the subject (as in West Jutlandic).

It is clear that the gender changes that started in West Jutlandic have influenced standard Danish. Non-countables may be referred to by pronominals, marked for formal gender (in this framework by Syn-pronouns) or by a Ref-pronoun. This development is a true semanticization of the gender system; the pronouns *den* (it.C) ‘it’ and *det* (it.N) ‘it’ can be used either as Syn-pronouns (as in the old system) or as Ref-pronouns (in the new system). In some dialects, in particular in varieties of East Jutlandic, this has triggered a change of the formal gender of nouns in such a way that the formal gender of nouns denoting non-countables has gone from common gender to neuter, for example nouns denoting ‘rye’, ‘clay’, and ‘wool’. Notably, this system differs from that of West Jutlandic, where nouns seem to have no formal gender at all.

The proposed analysis has been modeled on Swedish and the other Mainland Scandinavian languages (although Norwegian has not been discussed in detail). A brief look at some other related languages indicates that the proposed analysis could be applied to other languages as well. It remains to be seen to what extent it holds true more generally.

## References

- Abney, S.P., 1987. *The English Noun Phrase in Its Sentential Aspect*, unpublished PhD diss., MIT.
- Allen, K., 1977, Classifiers. *Language*, Vol. 53, No. 2, 285–311.
- Åkerblom, S., 2012. *Pyttepannkaka och mormoris*. Genus – tilldelat eller inherent? [Gender – assigned or inherent?] In Josefsson, G. (Ed.), *Perspektiv på genus. Nordlund 32*, Scandinavian Languages, Centre for Languages and Literature, Lund University, 65-100.
- Arboe, T., 2009. Motiveret genus – især vedrørende brug af bestemtheds morfem [Motivated gender – especially concerning the use of definiteness morphemes]. In: Hovmark, H., Stampe Sletten, I., Gudiksen, A. (Eds.), *I mund og bog – 25 artikler om sprog tilegnet Inge Lise Pedersen på 70-årsdagen d. 5. juni 2009*. Afdeling for Dialektforskning, Nordisk Forskningsinstitut, Københavns Universitet, 15–29.
- Beito, O., 1954. *Genusskifte i nynorsk*, DNVA Skr. II 1954 nr. 1.
- Bloomfield, L. 1935. *Language*. Allen & Unwin, London.
- Borer, H., 2005. *In name only*. Oxford University Press, Oxford.
- Borthen, K., 2003a. Norwegian Bare Singulars. PhD dissertation, Norwegian University of Science and Technology.
- Borthen, K., 2003b. Type-anaforen *det* [The type-anaphor *det* (it.N) ‘it’]. In: Lie, S., Nedrelid, G., Omdal, H. (Eds.), *Utvalgte artikler fra Det tiende møtet om norsk språk i Kristiansand 2003* [Selected articles from the tenth meeting about the Norwegian language in Kristiansand 2003]. Høyskoleforlaget AS, Kristiansand.
- Bosch, P., 1983. *Agreement and anaphora*. Academic Press, London.
- Bosch, P., 1986. Pronouns under control. A Reply to Liliane Tasmowski and Paul Verluyten. *Journal of Semantics* 5, 65–78.
- Bosch, P., 1988. *Representing and Accessing Focused Referents*. *Language and Cognitive Processes* 3, 207–231.
- Bowers, J., 1993. The syntax of predication. *Linguistic Inquiry* 24, 591–656.
- Butt, M., 2003. The Light Verb Jungle. In: *Harvard Working Papers in Linguistics*, ed. G. Aygen, C. Bower, and C. Quinn. 1–49. Volume 9, Papers from the GSAS/Dudley House Workshop on Light Verbs.
- Cardinaletti, A. & Starke, M. 1999.
- Chomsky, N., 1995. *The Minimalist program*. The MIT Press. Cambridge.
- Corbett, G., G. 1979. The agreement hierarchy. *Journal of Linguistics* 15, 203–224.
- Davidson, H., 1990. *Han hon den: Genusutvecklingen i svenskan under nysvensk tid*. Lundastudier i nordisk språkvetenskap Serie A, 0347–8971; 45. Lund University Press, Lund.
- Corbett, G., 1991. *Gender*. Cambridge University Press, Cambridge.
- Cornish, F., 1999. *Anaphora, Discourse, and Understanding. Evidence from English and French*. Clarendon Press, Oxford.
- Cornish, F., 1986. Anaphoric pronouns: Under linguistic control or signalling particular discourse representation. A contribution to the debate between Peter Bosch, and Liliane Tasmowski and Paul Verluyten. *Journal of Semantics* 5, 233–260.
- Crystal, David, 1999. *A dictionary of language*. The University of Chicago Press, Chicago.
- Dahl, Ö., 1999. Animacy and the notion of semantic gender. In: Unterbeck, B., Rissanen, M. (Eds.), *Gender in Grammar and Cognition*. Mouton de Gruyter, Berlin, 99–115.
- Dalin, Olof von, 1747–62. *Svea rikes historia*. 1–3. Stockholm.
- Davidson, Herbert, 1990. *Han hon den*. Lund University Press, Lund.
- Delsing, Lars-Olof, 1991. Om genitivens utveckling i svenskan. In: Malmgren, S.-G. & Ralph B. (Eds.), *Studier i svensk språkhistoria* 2. Department of Swedish, Göteborg. (Nordistica Gothoburgensia 14.), 12–30.
- Delsing, L.-O., 1993. *The Internal Structure of Noun Phrases in the Scandinavian Languages*. Ph.D. Dissertation, Department of Scandinavian languages, Lund University.
- Delsing, L.-O., 2013. Den stora katastrofen, med för- och efterskalv. Om kasussammanfallet i svenska. In: *Studier i svensk språkhistoria* 12. Stockholm 2013.
- Diderichsen, P., 1971. *Elementær dansk Grammatik* [Basic Danish grammar]. Gyldendal, København.

- Dixon, R.M.W. 1982. *"Where have all the adjectives gone?" and other essays in semantics and syntax*. Berlin: Mouton.
- Enger, H.-O., 2004. Scandinavian Pancake Sentences as Semantic Agreement. *Nordic Journal of Linguistics* 27.1, 5–34.
- Faarlund, J.T., Lie, S. & Vannebo K. I., 1997. *Norsk referansegrammatikk* [Norwegian reference grammar]. Universitetsforlaget Oslo.
- Faarlund, J. T., 1977. Embedded clause reduction and Scandinavian gender agreement. *Journal of Linguistics* 13, 239–257.
- Grimshaw, J. B., 1992. *Argument Structure*. MIT Press, Cambridge.
- Hagåsen, Lennart, 1992. Sverige var intresserad och facket ska vara obunden – en typ av neutruminkongruens. In: Widmark, Gun & al. (Eds.) *Svenska i harmoni. Fyra uppsatser om inkongruens*. Ord och stil 23. Hallgren & Fallgren, Uppsala, 60–74.
- Halle, M. & Marantz, A., 1993. Distributed Morphology and the Pieces of Inflection. In: Hale, Ken and Keyser, Samuel J. (Eds), *The View from Building 20*. MIT Press, Cambridge, 111–176.
- Halle, M., 1990. An Approach to Morphology. In: *Proceedings of NELS 20*, GLSA, 150–184.
- Hansen, E., 1971. Jensen er nede i postkassen med et brev. Konstruktioner med consubjectum i moderne dansk [Jensen is down by the mailbox with a letter. Constructions and consubject in modern Danish]. *Danske studier*, 66, 5–36.
- Hansen E. & Heltoft, L., 2011. *Grammatik over det danske sprog* [Grammar of the Danish language]. Det danske Sprog- og Litteraturselskab/Syddansk universitetsforlag, København.
- Heinertz, N. O., 1953. 'Ärter är gott – Karakteristiskt för latinet är rika böjningsmöjligheter'. Om ursprunget till det predikativa adjektivets neutralform i dylika uttryck [Peas is good – characteristic of Latin is its rich agreement possibilities. On the origin of neuter of the predicative adjective in such expressions]. *Moderna språk*, 257ff.
- Hellan, L., 1986. The headedness of NPs in Norwegian. In: van Riemsdijk, Henk & Muysken, Pieter (eds.), *Features and projections*, Dordrecht: Foris, 89–122.
- Heurlin, K, Eggermont, J.L., & Hoekstra, S., 1970. *Le français fundamental*. Gleerups, Lund.
- Hockett, Charles F. 1958. *A Course in Modern Linguistics*. New York: Macmillan.
- Høysgaard, J., 1747. Accentuered og Raisonnered Grammatica [Accentuated and reasoning grammar]. In: Bertelsen, H. (Ed.), *Danske Grammatikere IV*, (1920). Gyldendal, København, pp. 249–487.
- Jensen, E., 1956. *Houlbjergmålets Bøjningsslære* [The morphology of the Houlbjerg dialect]. Folkemaals Publikationer. Serie A. nr. 12. København.
- Jensen, J. M., 1897. Et vendelbomåls lyd- og formlære. H.H. Thiele, København.
- Jobin, B., 2012. Morpheme on the loose – the fluctuating use of the suffix –e in adjectival gender agreement in Swedish. Talk given at 15<sup>th</sup> International Morphology Meeting, Vienna, February 9–12, 2012.
- Josefsson, G., 2006. Semantic and grammatical genders in Swedish – independent but interacting dimensions. *Lingua*, Volume 116, Issue 9, 1346–1368.
- Josefsson, G., 2009. Peas and pancakes – on apparent disagreement and (null) light verbs in Swedish. *Nordic Journal of Linguistics* 32, 35–72.
- Josefsson, G., 2010. "Disagreeing" pronominal reference in Swedish and the interplay between formal and semantic gender, *Lingua*, vol 120: 9, 2095–2120.
- Josefsson, G., 2012. "Disagreeing" doubling *det*. *Working Papers in Scandinavian Syntax* 90, 111–140. Centre for Languages and Literature, Lund University.
- Josefsson, G. in press. Pancake sentences and the semanticization of formal gender in Mainland Scandinavian. *Language Sciences*.
- Julien, M., 2005. *Nominal phrases from a Scandinavian perspective*. John Benjamins Amsterdam.
- Källström, R., 1993. *Kongruens i svenskan*. Acta Universitatis Gothoburgensis Göteborg.
- Kristensen, M., 1902–1903- Breve fra en filolog til en ven, III, IV. Budstikke til Selskab for germansk Filologi 3.–4. Aargang. S.L. Møller, København, 33–35; 45–46.
- Lakoff, G. and Johnson, M., 1980. *Metaphors We Live By*. University of Chicago Press, Chicago.
- Malmgren, S.-G., 1984 [1990]. Adjektiviska funktioner i svenskan [Adjectival functions in Swedish]. *Nordistica Gothoburgensia* 13. Acta Universitatis Gothoburgensis, Göteborg.



- Marantz, A., 1988. 'Clitics, morphological merger, and the mapping to phonological structure.' In: Hammond, Michael & Noonan, Michael, (eds.), *Theoretical Morphology: Approaches in Modern Linguistics*. Academic Press, San Diego, 253–270.
- Nesset, T., 2006. Gender meets the Usage-Based Model: Four principles of rule interaction in gender assignment. *Nordic Journal of Linguistics* 32, 1369–1393.
- Norde, M., 1997: The History of the genitive in Swedish: a case study in degrammaticalization. Ph.D. diss, Faculteit der Letteren, Universiteit van Amsterdam.
- Parrott, J. K. 2009. Danish vestigial case and the acquisition of Vocabulary in Distributed Morphology. *Biolinguistics*, vol 3, no. 2–3, 270–304.
- Pelletier, F.J., 1979. Non-Singular Reference: Some Preliminaries. In: Pelletier, F.J. (Ed.), *Mass Terms*. Reidel, Dordrecht, 1–14.
- Pelletier, F.J., 1991. Mass Terms. In: Smith, B., Burkhardt, J. (Eds.), *Handbook of Metaphysics and Ontology*. Philosophia Press, Munich, 495–499.
- Pesetsky, D., & E. Torrego, E., 2005. T-to-C Movement: Causes and Consequences. In: Kenstowicz, M. (Ed.), *Ken Hale: A Life on Language*. MIT Press, Cambridge MA.
- Platzack, C., 2011. *Den fantastiska grammatiken.*: Norstedts, Stockholm.
- Platzack, C., 2012. Split Topicalization in Swedish and doubling with *det* (it.NEUTER). In: Brandtler, J., Håkansson, D., Huber, S., Klingvall, E. (Eds.), *Discourse and grammar: a festschrift in honor of Valeria Molnár*. Lund, Center for Languages and Literature, Lund University, pp. 411–431.
- Pustejovsky, J., 1995. *The Generative Lexicon*. MIT Press, Cambridge, MA.
- Rice, C., 2006. Optimizing gender. *Lingua*, Volume 116, Issue 9, 1394–1417.
- Rabb, V., 2004. *Genuskongruens på reträtt: Variation i nominalfrasen i Kvevlaxdialekten* [Gender agreement in decline. Variation in the nominal phrase in the Kvevdal dialect]. Åbo Akademis förlag, Åbo.
- Ringgaard, K., 1971. *Danske dialekter: En kortfattet oversigt* [Danish dialects: A brief overview]. Akademisk boghandel, Århus.
- Ringgaard, K., 1992. “Det, pron., art. og konj.” *80 ord* [It, pronominal, article and conjunction. 80 words]. Selskab for nordisk Filologi, København, 26–27.
- Rothstein, S., 2011. Counting, measuring and the semantics of classifiers. The Baltic International Yearbook of Cognition, Logic and Communication, Volume 6: *Formal Semantics and Pragmatics: Discourse, Context, and Models*, 1–42.
- Rosch, E., 1977. Classification of Real-World Objects: Origins and Representations in Cognition. In: Johnson-Laird, P.N. & Wason, P.C. (eds.), *Thinking: Readings in Cognitive Science*. Cambridge: Cambridge University Press, 212–222.
- Sandström, C., 2010. *Genus i östra Nyland - från dialektutjämning till dialektmarkör* [Gender in eastern Nyland – from a dialect leveling to dialect marker]. Helsingfors: Finska, finskugriska och nordiska institutionen vid Helsingfors universitet.
- Santelmann, L., 1993. The distribution of double determiners in Swedish: *den* support in D. *Studia Linguistica* 47, 154–176.
- Sigurdsson, H., 2009. Remarks on features. In: Grohman, Kleanthes (ed.), *Explorations of Phase Theory: Features and Arguments* (Interface Explorations). Mouton de Gruyter, Berlin, 21– 52.
- Skautrup, P., 1968. *Det danske sprogs historie* [The history of the Danish language]. Gyldendalske bogh., København.
- Steinmetz, D., 2006, Gender shifts in Germanic and Slavic: semantic motivation for neuter? *Lingua*, Volume 116, Issue 9, 1418–1440.
- Stowell, T.A., 1981. *Origins of Phrase Structure*, PhD. diss., MIT.
- Stowell, T.A., 1983. Subjects across categories. *The Linguistic Review* 2, 285–312.
- Svenska Akademiens ordbok* (SAOB). Svenska Akademien. <http://g3.spraakdata.gu.se/saob/>
- Tasmowski, L. & Verluyten, P., 1985. Control Mechanisms of Anaphora., *Journal of Semantics* 4, 341–370.
- Tasmowski-De Rijck, L. & Verluyten, P., 1982. Linguistic Control of Pronouns. *Journal of Semantics* 1, 323–346.
- Tegnér, E., 1925 [1964]. *Om genus i svenskan* [On gender in Swedish]. In: *Ur språkens värld, del II. Fyra uppsatser*. Bonniers, Stockholm.

- Teleman, U., 1987. Hur många genus finns det i svenskan? [How many genders are there in Swedish?] In: Teleman, Ulf (ed.), *Grammatik på villovägar*. Almqvist & Wiksell, Solna. Skrifter utgivna av Svenska språknämnden, 106–114
- Teleman, U., Hellberg, S. & Andersson, E., 1999. *Svenska Akademiens grammatik* [The Swedish Academy Grammar] Norstedts, Stockholm.
- Teleman, U., 1965. Svenskans genusmorfem [The gender morphemes in Swedish]. *Arkiv för nordisk filologi* 80, 217–230.
- Teleman, U., 1969. On gender in a generative grammar of Swedish. *Studia Linguistica* 23, 27–67.
- Thelander, M., 1976. Grammatisk genus i en nutida norrländsk talgemenskap [Grammatical gender in a contemporary speech community in Northern Swedish]. *Nysvenska studier*, 54, 96–129.
- Trosterud, T., 2006. Gender assignment in Old Norse. *Lingua*, Volume 116, Issue 9, 1441–1463.
- Vangsnes, Ø.A., 1999. *The identification of functional architecture*, Doctoral dissertation, University of Bergen.
- Van Epps, B., 2012. The three-gender system in two varieties of Jämtlandic. In Josefsson, G. (Ed.) *Perspektiv på genus. Nordlund* 32, Scandinavian Languages, Centre for Languages and Literature, Lund University, 7–64.
- Wellander, E., 1949 [1985]. *Riktig svenska* [Proper Swedish]. Esselte Studium, Stockholm.
- Wessén, E., 1965 [1992]. *Svensk språkhistoria*. Del 1. Ljudlära och ordböjningslära [Swedish language history. Part 1. Phonology and morphology]. Institutionen för nordiska språk. Stockholms universitet. (Serie: Nytryck i nordiska språk.)
- Wessén, E. 1969. *SILL ÄR GOTT*
- Western, A., 1921, [1975], *Norsk riksmåls-grammatikk for studerende og lærere* [Norwegian standard language grammar for students and teachers]. Aschehoug, Oslo.