## On the development of definiteness markers in Scandinavian

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#### **Abstract**

This paper deals with the development of three different definiteness markers in Old Scandinavian: the definite suffix -inn and the pre-adjectival articles (h)inn and  $s\acute{a}/pen$ . It is argued that only the development of the definite suffix followed the normal path of grammaticalization of definite articles. From the earliest Scandinavian texts, the runic inscriptions, follows that the future articles (h)inn and  $s\acute{a}/pen$  started as formal elements preceding weakly inflected adjectives. They appear in this function very early, and, seemingly, more or less obligatorily so from the beginning. On this ground, earlier analyses of the definite markers and the noun phrase in Old Norse are rejected. Further, the role of the regional variation in Scandinavia is highlighted in relation to the competition between the two free articles.

#### 1. Introduction

The grammaticalization of definiteness markers in Old Norse has recently been focused by several scholars, both in earlier working papers within this series, namely Faarlund (WPSS 79, 2007) and Abraham & Leiss (WPSS 80, 2007), and in other publications, e.g. Lohndal (2007) and van Gelderen (2007). All the authors mentioned have good points to make, but they also confuse the picture in some respects. In this paper, I will discuss some of these unclear issues, addressing the following questions.

- What is the relation between the two definite "articles" deriving from the (lost) demonstrative (h)inn in Old Scandinavian, namely the post-posed enclitic article -inn and the pre-adjectival (h)inn?
- How can we capture the grammaticalization process of -inn and (h)inn from a structural point of view? Is "grammaticalization downwards", as proposed by both Faarlund (2007) and Lohndal (2007), the ultimate analysis? (Faarlund and Lohndal are heavily criticized by Abraham & Leiss (2007) for their unorthodox view on grammaticalization in this case.)
- Why is *hinn* replaced by  $pen (< s\acute{a})$  as a pre-adjectival article in Mainland Scandinavian?

The answers to the different questions above are in some respects mutually depending, but I will nevertheless try to focus on them in turn.

A guideline for the discussion is the idea that we have to keep the perspective wide in time as well as in space. A lot of work on Old Scandinavian in these days focuses on texts from Iceland and Norway from the 13<sup>th</sup> and 14<sup>th</sup> centuries, i.e. the language that is generally termed Old Norse. But the development may become much clearer if we also, when possible, take earlier stages of this language into account, and, further, if we consider the regional variation in all of Scandinavia.

To some extent it is possible to get a more precise knowledge of the Scandinavian language before the 13<sup>th</sup> century. The runic inscriptions date from the 9<sup>th</sup> or 10<sup>th</sup> century and some hundred years ahead. (I disregard here the even older, but rather few and often unclear, Proto-Scandinavian inscriptions.) Even if these texts generally are extremely short, limited in number and unevenly spread, with peaks in different periods of time in different regions, they make nevertheless an excellent complement to the later manuscripts.

Good reasons to widen the perspective geographically are the mutual intelligibility of the languages in Scandinavia during the time under consideration, from Iceland to the Isle of Gotland in the Baltic, and the fact that these languages in some respects developed in a common direction. Since we cannot take for granted that everything happened spontaneously and simultaneously all over this vast area, it may sometimes be a more fruitful approach to look for novation centres and paths of diffusion, wherever they may be, rather than to restrict the investigation to some very closely related varieties.

The somewhat unorthodox term Old Scandinavian is used here, and in the following, when a more precise specification in time and space is not essential. The term comprises all Scandinavian varieties from the Viking Age to the late Middle Ages (approx. from the 9<sup>th</sup> to the 15<sup>th</sup> century).

What I have to say in the following is based on preliminary results from a work recently started on the noun phrase in Old Scandinavian. My empirical base is for the time being rather limited. But I have excerpted and sorted noun phrases in runic inscriptions from different parts of Scandinavia and I will cite some of them (in transcribed form) in the following. Only the individual code of the inscription will then be given as reference. The first letters/letter of the code signal(s) the regional provenience: Sö, Ög, Hs, Vs, U =

different provinces in Sweden (see Sveriges runinskrifter), DR = Denmark (see Danmarks runeindskrifter), N = Norway (see Norges innskrifter med de yngre runer). The inscriptions can also be searched by their codes in the downloadable "Scandinavian runic-text database" (see address under References).

3

The rest of the paper is organized as follows. Section 2 is a short clarification on what three definiteness markers are treated in the paper. Section 3 deals with the relation between the definite suffix -inn and the pre-adjectival (h)inn in Old Scandinavian. Section 4 is a discussion on form and meaning of definite noun phrases, resulting in a model of the abstract structure of noun phrases, a model that is applied in section 5, which deals with the grammaticalization of -inn and (h)inn from a structural point of view. The question of why (h)inn is replaced by pen is highlighted in section 6. Section 7, finally, contains some concluding remarks.

#### 2. Three articles, three grammaticalization processes

When talking about the developing of definiteness markers in Scandinavian, there are three different articles to consider (if the definite suffix may also be covered by the term article). As will become clear in the following, I take the three articles to be the results of three, principally independent, grammaticalization processes.

First, there is the development of the definite suffix on nouns, sometimes referred to as the post-posed definite article. The origin of this suffix is (presumably) a post-posed demonstrative (h)inn, which came to cliticize to the noun. The process as such, i.e. something like:  $fisk_{ACC.}$  (h)inn 'this > the fish' > fiskinn 'the fish', is not possible to follow in the sources, but I do not think there is reason to hesitate about it in principle. <sup>1</sup>

Then we also have (h)*inn* used as a pre-adjectival article, see (1). I assume without discussion that this word and the definite suffix have the same origin,

<sup>&</sup>lt;sup>1</sup> A puzzling fact is that we do have a demonstrative *hinn* in Old Scandinavian, but this *hinn* is chiefly used to express contrast: 'the other (one); the former (one)' (cf. Germ. *jener*), and does not show article-like qualities. For reasons that it would carry to far to sort out here, I do not believe that this *hinn* and the origin of the definite suffix are the same word. The etymologists do neither present a definite answer, nor a unanimous one. (Blöndal Magnússon 1989:329, Krause 1968:53, Lehmann 1986:J5, de Vries 1962:228.)

The proposal by Elly van Gelderen (2007: 294) that the origin of the post-posed article is a locative adverb *hinn/hitt* 'here' is, to say the least, remarkable; locative adverbs do not appear in a full set of gender-number-case-forms as the post-posed article did.

as does obviously Faarlund (2007).<sup>2</sup> (However, whereas a common origin is of little importance for my analysis, it is essential for Faarlund's.) The free article (h)inn is practically lost in modern Scandinavian, but can occasionally be found in formal (chiefly written) Icelandic. (Sigurðsson 2006:195 f.)

(1) Hialpi hinn hælgi Kristr hans sal. Runic inscription from help-SUBJ. the holy Christ his soul 'May the holy Christ help his soul.'

Besides the two articles developed from (h)inn, there is actually one more definite article to take into account, viz. the pre-adjectival article that is still used in Scandinavian varieties except Icelandic. This article originates from a demonstrative normally labelled  $s\acute{a}$ , which is the irregular form in the masculine singular nominative. The deviant s-forms,  $s\acute{a}$  and the feminine singular nominative  $s\acute{u}$ , are preserved in Modern Icelandic, but were, in Mainland Scandinavian, rather early substituted for p-forms, pen and pe respectively, by analogy with the rest of the paradigm. The article in modern Swedish, Norwegian and Danish is den.

The pre-adjectival article is used only when an adjectival attribute precedes the noun. In modern Swedish, Norwegian and Faroese, the noun takes the definite form even in these cases, see (2a). Older stages of these languages are reflected in (modern) Danish, where combined use of the two articles is not possible, cf. (2b). In Icelandic,  $s\acute{a}$  has never become an article. Modern Icelandic does not need any pre-adjectival article at all; definite (as well as indefinite) noun phrases can be headed by an adjective, see (2c).

<sup>2</sup> One reason not to identify i

<sup>&</sup>lt;sup>2</sup> One reason not to identify it with hinn 'the other/former (one)' (cf. note 1) is the tendency of h-dropping, here captured by the brackets around h in (h)inn. The variant with h is admittedly the most common in the runic inscriptions from the Scandinavian mainland and in the Norwegian examples in Faarlund 2004, but Icelandic manuscripts most often have inn (or enn). The contrastive demonstrative is usually written with h, even in Icelandic manuscripts.

<sup>&</sup>lt;sup>3</sup> I let *pen* represent this secondary form, disregarding the variation in spelling (and pronunciation) of the vowel (<e>/<æ>/<a>) in Old Scandinavian.

To sum up, the Scandinavian languages developed very early, by means of grammaticalization, three different definiteness markers:

- the definite suffix -inn (mod. Sw./Norw./Dan. -en) which originates from the demonstrative (h)inn,
- the pre-adjectival definite article (h)inn from the same demonstrative,
- the pre-adjectival definite article *sá/þen* (mod. Sw./Norw./Dan. *den*) from the corresponding demonstrative *sá/þen*.

The definite suffix remains in all standard varieties of Scandinavian. The preadjectival function is upheld by *den* in Mainland Scandinavian, where (*h*)*inn* is totally lost. Modern Icelandic can mostly do without any pre-adjectival article, but uses *hinn* occasionally.

### 3. The relation between the definite suffix and the preadjectival (h)inn

The cliticizing article *-inn* and the pre-adjectival (*h*)*inn* in Old Scandinavian may seem to represent two stages on one and the same grammaticalization cline:

#### (3) demonstrative > free article > clitic > suffix

This view is also put forward by Faarlund (2007:21 f.). The treatment of the grammaticalization in Faarlund 2007 (and in Lohndal 2007) is further founded on the assumptions that the post-posed article, -inn, was a clitic, not yet a suffix, in Old Norse, and that the pre-posed definite article (h)inn was a free counterpart to the clitic.

My opinion is that only the development of the definite suffix follows the normal path of grammaticalization of definite articles. As I will return to below, the original function of the pre-adjectival article was not to convey "definiteness" to the noun phrase. It presumably started in the same demonstrative as the cliticizing *-inn* and may have ended up as a normal definiteness marker, but it followed its own path.

Thus, the suffix did not develop from the free article. And nor did the free pre-posed article develop from the post-posed enclitic one, as put forward by Abraham & Leiss (2007). The authors' references to the empirical basis for their statement are far from clear. An especially confusing passage is the following.

In fact, the earliest independent, unbound definite article morphemes were also postposed (albeit not enclitic). They are attested long before the enclitic article. What is even more striking is the fact that the preposed article is limited in occurrence to Art + adjectival attribute + N. (Abraham & Leiss 2007:20)

It is true that the earliest instances of (h)inn are post-posed. However, what Abraham & Leiss do not report is the striking fact that these earliest instances of post-posed (h)inn always precede an adjective. Thus, the earliest instances of (h)inn are all clear instances of the pre-adjectival article, the only difference from the later instances of the same word being the post-noun position, see the Viking Age examples from runic inscriptions in (4a–b).

(Ög 136, the Rök stone, 9<sup>th</sup> cent.<sup>4</sup>) **(4)** a. ÞioðrikR hinn þurmoði Theodoric the bold b. Gunnborga [...] hin goða (Hs 21)the good Gunnborga

In a long diachronic perspective on syntax, the position of the complex (h)inn + adjective is not odd at all; the earliest Scandinavian had chiefly (though not solely) "noun-first" word order in noun phrases. This means that, when taking a longer period of time into consideration, a label such as post-posed article is hazardous. This is why I often stick to the term pre-adjectival article instead.

It should be emphasized here that we do not find in the sources any clear example of a post-posed free (h)inn, which is not followed by an adjectival attribute, i.e. a precursor of the definite suffix. There are a few runic inscriptions of interest, but this is not the place for a deeper discussion on the matter. The two instances of andinniDAT, 'the soul' on two Swedish runestones from the 11th century are traditionally taken as the first instances of the definite form in Scandinavian. Formally the interpretations and'inni or and *inni* are acceptable too, but they lack empirical support.

Contrary to Faarlund, I believe that the enclitic article was a suffix already in early medieval Scandinavian. The evidence given for its status as a clitic is not conclusive, and the presentation of the morpheme as a lexical head that needs a host to lean on and thus attract another head (Faarlund 2007: 31), seems to me as a good description of an inflexional affix.

<sup>&</sup>lt;sup>4</sup> The interpretation of the inscription on the rune-stone from Rök has recently been questioned on several points by Bo Ralph (2007). According to Ralph it is not evident that the name Theodoric is correct, but this does not affect my point here.

The dating of the development should, in my opinion, be discussed in relation to the changes in the noun phrase word order. It is of course due to the normal post-position of demonstratives in earliest Scandinavian that we have got a definite suffix at all and not (only) a pre-posed (free) definite article, like many other European languages. The post-posed demonstrative has been reinterpreted, maybe first as a cliticizing article, finally as a suffix. And it is likely that the process is completed before "noun-first" had ceased to be the dominant word order of noun phrases.

At a first stage, when nouns in noun phrases regularly precede all kinds of determiners and attributes, we can assume that the noun is fronted to the first position for some reason independent of the article. At some point, however, the post-posed article is reinterpreted as a suffix, i.e. starts to attract the noun; a suffix "needs a host to lean on". As long as nouns are still regularly fronted to first position in all kinds of noun phrases, we can not see on the surface whether the definiteness marker is just a cliticizing article or a suffix. But, when, later, nouns are no more fronted to a position before free determiners, but nevertheless precede *-inn*, we must conclude that the reinterpretation has already taken place.

Now, the pure access to a formal definiteness marker does not immediately lead to a frequent use of it, as is convincingly demonstrated by Elisabeth Leiss (2000, 2007). Early article systems are, as Leiss (2007:75) puts it, hypo-determining. In a hypo-determining language, explicit definiteness marking by an article is a marked alternative, primarily used to avoid ambiguity. Absence of definiteness marking is still normal also when a definite interpretation is intended, provided that the definite interpretation is the most plausible one within the context.

As mentioned above, I take the pre-adjectival (h)inn to have a quite different function from the definite suffix. As concerns the latter, it is reasonable to believe in a grammaticalization process that does not deviate from what is normal when a language acquires definiteness marking. It can be described in terms of an expanded use of the original demonstrative, from its true deictic function, to an anaphoric function, i.e. use of the demonstrative to refer to a just mentioned referent, and finally to the function of independent definiteness marking. (Cf. Leiss 2007:94 ff.)

The Old Scandinavian pre-adjectival (h)inn, however, seems to be just a formal element preceding adjectives with so called weak inflection. Adjectives in Old Scandinavian were, as were demonstratives and pronominal

determiners, inflected to agree with the head noun in gender, number and case. But the declension of adjectives could be both strong and weak, and the weak declension had a very reduced set of contrasting forms. (The situation is the same in modern Icelandic, whereas Mainland Scandinavian now has just a few strong forms, agreeing in gender and/or number, and only one common weak form.)

For the moment, I have no decisive idea about the exact role of the preadjectival article. It could be tempting to take the more discriminating inflection of (h)inn to compensate for the weak forms of the adjectives. But then we land in the question why we have weakly inflected adjectives at all – a question I will not try to answer here.

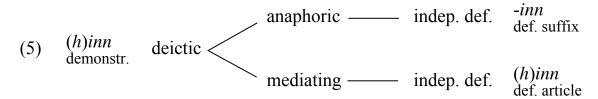
An examination of the instances of (h)inn + adjective in the runic inscriptions leads to the striking result that the majority of them occurs in connection with a proper name. The examples in (4a–b) are representative so far, at least for the genre of memorial inscriptions. For some of these instances it can be argued that the function of (h)inn + adjective is likely to restrict the reference of the noun phrase. There is for instance a rune carver who calls himself Balli hinn rauði 'Balli the red' (Vs 15), which could be a way to handle a situation where more than one Balli was around. But not all adjectives must or can be interpreted in a restrictive way. A purely descriptive attribute is (hinn) hælgi '(the) holy' in Kristr hinn hælgi 'the holy Christ' (U 391).

Whatever the function of the pre-adjectival (h)inn in the oldest stages of Scandinavian was, it seems clear that it was not used in the normal functions of a future definite article. This does not mean, however, that it did not have the qualities to become an article. It seems like it (maybe) did, once it was no longer regularly preceded by the noun. We cannot take for granted, though, that the article interpretation is at hand as soon as (h)inn appears for the first time in the initial position of the noun phrase, since noun phrases were not yet obligatorily headed by an article (or by a noun inflected for definiteness).

In (5), where I show the different paths of development of the definite suffix and the free definite article (h)inn, I tentatively use the term "mediating" for the primary function of the latter, the logic being that it mediates

<sup>&</sup>lt;sup>5</sup> The same holds true in modern Scandinavian, including varieties with double definiteness, which makes the description of the pre-posed article in modern Norwegian in Abraham & Leiss 2007 doubtful: "the preposed article seems to be a set-choice marker in the sense the it singles out those Ns that have the property of the attributed adjectival." (Abraham & Leiss 2007:20)

between the noun and the weak adjective. The label is deliberately vague (for want of something better) and more descriptive than explanatory; obviously, the attribute must be accompanied by the pronoun, but I have no very good answer to why.



The conclusion of the exposition so far can then be summarized as follows.

- The definite suffix -inn and the free definite, pre-adjectival, article (h)inn in Old Scandinavian developed through two parallel processes.
- The first process must have been completed rather early, during the stage of dominating "noun-first" word order. The definite form, however, was a marked alternative as long as the language remained hypo-determining, which can explain the infrequent use of it in early texts.
- The pre-adjectival use of (h)inn is recorded very early, and seems already from the beginning to be more or less obligatory together with weakly inflected adjectives. The function of independent definiteness marking cannot have been achieved before "noun-first" had ceased to be the dominant word order.

#### 4. The meaning and structure of definite noun phrases

Structural proposals on the noun phrase in Old Scandinavian are by necessity speculative, since there is no consensus on the abstract structure of noun phrases in general. However, it is impossible to discuss the grammaticalization of the definiteness markers from the syntactic perspective without any idea at all about what the abstract structure might be. In this section, I will briefly present my own view on the matter.

In a nut shell, my point is that noun phrases regularly have two functional projections in their left periphery that can be associated with definiteness, here labelled DP and dP. Definiteness, however, is a complicated concept. On the one hand, a noun phrase may be regarded as formally definite if it contains some definite morpheme. On the other hand, definiteness is also taken to capture a certain meaning, the meaning that a formally definite noun

phrase expresses. But it is not easy to define "the one and only" meaning of definiteness. And, if there is one, how come then, that some languages regularly use structurally definite noun phrases to capture e.g. generic reference, whereas other languages prefer indefinite noun phrases in the same cases?

The assumption of the DP-dP structure (in practice a split of the traditionally DP) is founded on the basic idea that syntax – despite the fact that there is not always a one-to-one relation between form and meaning – is used to derive meaning, e.g. to capture the meaning of "definiteness".

The presentation starts with a discussion in section 4.1 of what the grammatically encoded meaning of "definiteness" might be, whereas section 4.2 focuses on what consequences the adopted view has for the abstract structure of noun phrases.<sup>6</sup> I have found it necessary not to be too short. The argumentation is, however, by no means exhaustive.

#### 4.1 The grammatically encoded meaning of "definiteness"

The concept of definiteness is often explained semantically or pragmatically in terms like specificity, identifiability, uniqueness etc. A fairly good description is the following: A definite noun phrase is used when the speaker assumes that the hearer, within the given context (in the broadest sense of the word), can uniquely identify the intended referent(s) from the descriptive core of the noun phrase. Sometimes, also syntacticians take some concepts of this kind as formal grammatical ones. In e.g. Julien 2005, which for the time being is the most elaborate model of the Scandinavian noun phrase, definiteness is connected to both specificity and inclusiveness. (See also Lyons 1999.)

I my opinion, the grammatically encoded meaning of definiteness should be understood as more formal in nature. Such a standpoint is well motivated considering the nature of syntax, but has other advantages as well. A nice outcome of my proposal is e.g. that it facilitates the understanding of why definite markers, once they are established in the prototypical (specific) uses, tend to expand to generically referring phrases and even further. (This development is well attested cross-linguistically, see Greenberg 1978. Cf. also Dahl 2007 on Scandinavian varieties.)

<sup>&</sup>lt;sup>6</sup> The discussion on definiteness from the semantic point of view is partly based on earlier work on the topic; see e.g. Stroh-Wollin 2003.

If we take as our point of departure the idea that the function of determiners is to restrict the set of referents in relation to the largest possible set given by the descriptive core of the phrase, a formal way to capture the meaning of definiteness is provided by the meta-language of set theory. I call the mentioned "largest possible set given by the descriptive core" of a noun phrase the universal set (U). The universal set of a noun phrase like *the dogs* for example, is defined by the denotation of the noun *dog*. The actual reference of the same phrase may be different every time it is uttered, but the set of referents (R) is invariably a subset of the universal set.

Now, one may object that the set of referents is always a subset of the universal set, irrespective of whether the noun phrase is headed by an indefinite or a definite determiner. This means that we cannot capture the difference between e.g. indefinite and definite noun phrases solely by defining the relations between R and U. There are, however, good reasons to regard the restriction of the set of referents as a two-step process. If we consider the true meaning of *the dogs* not as a simple subset of the universal set of dogs, but as 'the totality of a (contextually) restricted set of dogs', we have in fact to do with two quantifications.

To handle this, we need an intermediate set between U and R; I call this set the set of selection (S). When counting with an S, the set of referents is not directly defined in relation to U, but selected from S, which in turn is defined in relation to U. Now, we have a tool to discriminate between definite and indefinite noun phrases. First, the set of selection (S) is a subset of U in the definite cases, but equal to U in the indefinite cases; second, the set of referents (R) is a subset of S in the indefinite cases but equal to S in the definite cases, cf. *some dogs* and *the dogs* in (6a–b).

(6) a. There are *some dogs* in the garden. interpretation:  $R \subset S = U$  b. *The dogs* are in the garden. interpretation:  $R = S \subset U$ 

The sign for "is a subset of" used in the examples in (6),  $\subset$ , is to be more precise the sign of "is a true subset of". If S is a true subset of U, it means that it is certain that S has fewer members than U, that S cannot be equal to U. This is also in accordance with the prototypical interpretation of definite noun phrases.

However, definite noun phrases are sometimes used with generic reference, as *the Brazilians* in (7), which means that the formal meaning of definite noun phrases is less precise than is shown by the interpretation of

(6b); generic reference means no restrictions whatsoever between U and R. In fact we have to assume that the formal meaning of definite noun phrases is  $R = S \subseteq U$ , which allows both the interpretation  $R = S \subset U$  as in (6b) and the interpretation R = S = U as in (7).

(7) The Brazilians are crazy about football. interpretation: R = S = U

Now, generic reference is (in the Germanic languages) more often expressed by noun phrases with no visible determiner. It is for instance fully possible to omit the definite article in (7) and still have a grammatical sentence with approximately the same meaning. This means that the interpretation R = S = U must also be a possible interpretation of noun phrases with no visible determiner. The formal meaning of such noun phrases is also ambiguous,  $R \subseteq S = U$ , since they may have both generic and more restricted references, cf. the noun phrase dogs in (8a-b).

(8) a. She doesn't like dogs. interpretation: R = S = U b. There are dogs in the garden. interpretation:  $R \subset S = U$ 

To summarize: by assuming that the restriction of the set of referents is made in two steps, we may discriminate between the inherent meanings of 1) noun phrases headed by indefinite determiners ( $R \subseteq S = U$ ), 2) noun phrases with no visible determiner ( $R \subseteq S = U$ ) and 3) noun phrases headed by definite determiners ( $R = S \subseteq U$ ). The ambiguities in the latter cases may be taken as a natural consequence of the economy of language. It is also a hint to why e.g. generic reference may be expressed both by indefinite noun phrases (often so in the Germanic languages) and by definite noun phrases (the normal way in Romance).

In addition, the formal, and not very precise, way to capture the meaning of definite noun phrases also holds true in cases when a description like "uniquely identifiably" is a qualified truth. The formal meaning of a definite noun phrase that S is a subset of U may be taken as a very general instruction to the hearer to find out (in any way) how S can be reduced in relation to U, but nothing in the formula forces us to say that a definite phrase is ruled out as soon as the hearer is not able to exactly identify the intended referent(s). If somebody e.g. has broken a leg, the most common way to refer to the limb in contexts like "NN has broken ..." is by a definite noun phrase, as *benet* 'the leg' in the Swedish version in (9a) or *her leg* as in the corresponding English

sentence in (9b). Nobody seems here to bother about the fact that most people have two legs and that it remains unclear which one is broken.

- (9) a. Hon har brutit *benet*. she has broken leg-DEF.
  - b. She has broken her leg.

Then we may take it as a pragmatic, non-grammatical, question why the tendency to use definite phrases decreases considerably as the number of possible referents increases; *she went to see her brother* is fine, even when the brother is not uniquely identifiable to the hearer, but *she went to see her friend* is odd if the friend is not a very special friend or a friend mentioned beforehand, and thus uniquely identifiable.

### **4.2** Noun phrase structure – in Modern Scandinavian and earlier

I take the grammatically encoded meaning of definiteness as presented above to have syntactic consequences. To capture that definiteness is composed by two interdependent relations, the relation between U and S and the relation between S and R, we need two projections. The value of S has to be settled separately, before the value on R can be defined. To this end, I split the, nowadays generally assumed, DP into a (big) DP and a (small) dP. Since the finer organisation of the structure below dP is not at stake here, I let it be represented by a simple NP in (10).<sup>7</sup>

During the derivation of a definite noun phrase, some lexical element that can value S in relation to U is merged to the (little) dP, either to the head or to the specifier. Formally, we can take d to host an abstract feature,  $\sigma$ ,

<sup>7</sup> However, to avoid misunderstandings: I do not distinguish any projections like NumP, CardP or Q(uant)P. I assume inflection in number to take place in NP, i.e. below dP, and quantifiers to be first merged in dP or DP. It could also be noted, since number and quantifiers are sometimes associated with a common projection, NumP, that I do not regard inflection in number a question of quantification, but rather a question of conceptualization of the entity. A plural noun denotes a collective of countable individuals, whereas a singular noun denotes something uncountable, a mass entity or one single individual.

attracting a lexical counterpart to give it a value. I assume articles to be heads and other determiners, i.e. even demonstratives, to be specifiers in the normal case. (Cf. Giusti 1997:107 ff.; van Gelderen 2007:283 ff.) Elements in dP restrict the set of selection in relation to the universal set, the latter being defined by the descriptive content of the constituents in the structure below dP. In case a definite article is merged to the d-head, the restriction is purely formal and S, formally  $\sigma$ , is just valued as a subset of U: S  $\subseteq$  U.

Within the higher (big) DP, the value of R is settled. In the unmarked case, a determiner from (little) dP is remerged. The determiner, carrying the  $\sigma$ -feature, represents S, which can equate with R, when the determiner is moved to the higher projection.

If the noun phrase is headed by more than one determiner, as *these my two books*, I take all determiners to be first merged, in multiple dPs below DP in the normal case, and I consider it sufficient that only the highest one moves to the DP.

Thus, I regard all determiners as (presumptive) d-elements; having more than one d-constituent in one and the same noun phrase should not be more problematic than having more than one non-finite verb in one and the same clause. <sup>9</sup> The tendency of a fixed relative order between demonstratives, possessives and quantifiers can be handled in some way or another, e.g. in terms of scope.

<sup>8</sup> A postulate for the assumption is that articles are simple morphemes, possibly spelled out as different allomorphs, whereas e.g. demonstratives are complex units of stem + inflection morpheme (= phrase constituents). For the moment, I am not sure whether this necessarily has to be the case for every possible article or demonstrative.

Now, it is possible to state that finite verbs are specified for both kinds of relations, whereas non-finite verbs carry specification only for the relation between the time of the event and a time of reference. Let's then split TP into a (big) TP and a (small) tP and take the latter to regulate relations between E and R, and the former to regulate the relation between R and S, and we have the parallel mentioned above. Only one verb in the clause, the finite one, can move to TP; additional verbs, the non-finite ones, remain in tPs below TP, and the number of tPs is equal to the number of verbs in the clause.

<sup>&</sup>lt;sup>9</sup> I actually presume that there might also be a structural parallel between clause structure and noun phrase structure here. The specification of clausal tense is, like the specification of the set of referents in noun phrases, a process in, at least, two steps. This, now classical, view on tense was first explored in a book by Hans Reichenbach (1947:287 ff.). By distinguishing a time of Reference (R), in addition to the time of Event (E) and the time of Speech (S), Reichenbach manages to describe different tenses in a logical way. The tense of a clause does not simply express the temporal relation between the time of the event and the moment of speech, but the combination of 1) the temporal relation between the time of the event and the time of reference (i.e. E and R) and 2) the temporal relation between the time of reference and the time of speech (i.e. R and S). (See also Vikner 1985 and Christensen 1997.)

Besides determiners, also adjectives may be merged to spec-dP, always to the lowest one, in case of multiple dPs. Theoretically, adjectives may be merged either to spec-NP or to spec-dP, and I believe that different languages follow different strategies in this respect. As concerns the Scandinavian languages, I assume weak adjectives to be dP-merged, whereas strong adjectives presumably are NP-merged.

Furthermore, it is not always possible to make a clear-cut distinction between adjectives and determiners. Possessives, for instance, often function as determiners, but they can also be more adjective-like and be merged below dP. I take the latter to be the case in e.g. Norwegian noun phrases with a post-posed possessive, like *den lille bilen min* 'my little car' (lit. the little car my).

Now, there are some complications when we come to definite noun phrases in the Scandinavian languages. Noun phrases consisting of a single noun in the definite form, like Sw./No./Dan. *huset*, Isl. *húsið* 'the house', are easy, though. The definite morpheme (e.g. *-et/-ið*) is first merged to the dhead and, being a suffix, attracts the nearest head down the tree (e.g. *hus/hús* in N). Then the complex head moves to D.

However, as noted above, the standard varieties of Scandinavian represent three different solutions when the noun in a definite noun phrase is preceded by an adjective, see (2a–c), here repeated as (11a–c). As mentioned, Norwegian and Faroese follow the Swedish pattern.

Swedish, Norwegian and Faroese have so called double definiteness, i.e. combined use of the definite form of the noun and the pre-posed definite article. Here, I take only the suffix of the definite morphemes to be merged in dP; it is merged to the d-head from where it attracts (and amalgamates with) the noun. The free article on the other hand, has in these languages an unvalued  $\sigma$ -feature, and is merged directly to D, from where it probes for a specification on  $\sigma$ . This is in fact very much in line with the expletive interpretation of the free article in double definiteness-languages in Delsing 1993.

In Danish, the pre-posed article cannot be used in combination with the definite suffix on the noun. I take this to testify to a formal difference between the free articles in Swedish, Norwegian and Faroese on the one hand and in Danish on the other. The Danish article is a true determiner with a valued  $\sigma$ -feature, which rules out definiteness marking on the noun. The free article is, regularly first merged in dP and moves to DP. <sup>10</sup>

Icelandic lacks the pre-posed definite article of the other Scandinavian languages. This means that an adjective may be the first constituent of a definite noun phrase as in (11c). I believe that the DP in this case is lexicalized by movement of the entire dP (representing S) to spec-DP. A similar phrase-movement is also proposed by Julien (2005:54 ff.), but for different reasons. Julien also suggests phrase-movement to spec-DP in definite noun phrases without pre-posed attributes (p. 27 f.), where I prefer head-movement, cf. above.

The analysis of the noun phrase so far follows in principle the now widely accepted hypothesis that noun phrases in languages with articles are DPs. But what about languages without articles? In my opinion, the problem is above all a question of the labelling of the highest functional projection of the noun phrase. It is obvious that the language in the oldest proofs of Scandinavian lacks articles, but the well attested noun-first word order, with nouns preceding e.g. demonstratives and possessives, actually talks in favour of a DP-structure, the only problem being the D-label.

The noun-first word order is demonstrated by the typical pattern of memorial runic inscriptions in (12). The internal word orders of the noun phrases *stæin þenna* and *faður sin goðan* are the normal ones before the Middle Ages. The word order then gradually shifts towards the modern patterns: *denna sten* 'this stone' and *sin gode fader* 'his good father'.

(12) NN ræisti *stæin þenna* eftir NN, *faður sin goðan*. NN raised stone this after NN father his good.

The noun phrases in (12) can easily be inserted in a structure like the one in (10), provided that the noun can move to D. The spec-dP is the natural locus of the demonstrative and a possible locus of the possessive (cf. above).

<sup>&</sup>lt;sup>10</sup> A related difference between Swedish, Norwegian and Faroese on the one hand and Danish on the other, is that the former languages use *det*, i.e. the neuter form of *den*, as expletive non-referential subject in existential clauses, whereas Danish cannot have *det* in the same kind of constructions, but uses *der*, cf. the English existential *there*.

But why should bare nouns be moved to D? An answer to this question follows if we regard the DP just as the left edge of a phase. Then we have a reason to collect all information in the D-projection that is relevant for the use of the noun phrase in a further derivation, e.g. in a clause. And what information is that?

A specification of the set of referents is obviously one important piece of information. Obviously, because articles and other determiners, as means for this specification, regularly take the first position in noun phrases. But the importance is also evident when considering the impact of articles on the Aktionsarten of clauses (in languages with no or limited morphological aspect marking), cf. e.g. the difference between *peel the potatoes* and *peel potatoes*.

But also case is of course relevant information in the further derivation, and this fact might have consequences for the constituent order of noun phrases in languages with morphological case marking but no articles, like early Old Scandinavian. Even if inflection for case takes place below the DP-dP domain, which I believe it does, a specified value for case has nevertheless to be transmitted to the phase edge. Then, in the absence of some determiner, that carries itself a value for case or can probe for it, some other constituent has to lexicalize the DP.

Movement of a case marked noun is of course one way to transmit the relevant value to the left edge of the noun phrase, when the language lacks articles. Movement of some attribute, either case-marked or capable to probe for case, would be another. However, it should be noted that the first strategy is by far the most common one in e.g. the runic inscriptions of the Viking Age.

An overall conclusion of the discussion so far is that there is really no reason to assume different structures of the noun phrases in Old and Modern Scandinavian (or at all?). We may see considerable changes with respect to flexion and word order, but, contrary to Faarlund (2007) and Lohndal (2007), I think the underlying abstract structure remains the same.

It could be especially noted that Faarlund (2007:32 f.) assumes that DP-recursion was a possibility in Old Norse, but that it is not any more. DP-recursion is, according to Faarlund, a way to capture examples like *bau in stóru skip* 'those the large ships' with double determiners. From the assumption that demonstratives are heads (Faarlund 2007:33), it follows that one D-head is needed for the demonstrative (*bau*) and another for the article (*in*).

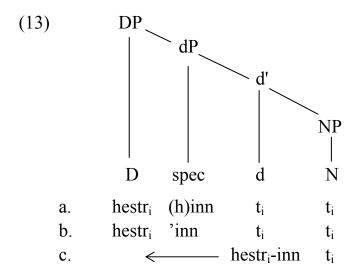
However, it is still fully possible to use double determiners in corresponding noun phrases, as in (Swedish) *dessa de stora skeppen* 'these the large ships'. So, if demonstratives are heads, the conclusion should be that also Modern Scandinavian must allow DP-recursion.

With my assumption that demonstratives are specifiers (cf. above), the examples do not prove anything as concerns the number of D-projections; the demonstrative could precede the article within one and the same D-projection, which I actually mean is the case in at least the modern variant. The splitting of the DP into two projections is motivated for other reasons.

# 5. The grammaticalization of -inn and (h)inn from a structural point of view

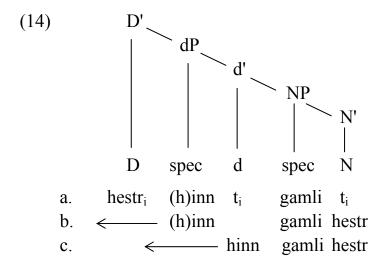
With the structure of the noun phrase as proposed above, the grammaticalization process of the definite markers in Old Scandinavian, the suffix -inn and the free article (h)inn, comes out quite straightforward. We can date the point of departure in both cases to a stage where nouns regularly are fronted to D and precede demonstratives in spec-dP.

The development of the definite suffix is illustrated in (13a-c), with *hestr* (*h*)*inn* 'this horse' becoming *hestrinn* 'the horse'. (13a) gives the point of departure: *hestr* (*h*)*inn*. (13b) shows a stage that is structurally rather similar to the initial state, the only difference being that the demonstrative, or maybe already article, tends to cliticize to the noun: *hestr'inn*. At some point this cliticizing is reinterpreted as in (13c); the article has got head status and is



taken for a suffix. As such it attracts the noun from N. The complex head may then move on to D.

The development of the free, pre-adjectival, definite article is illustrated in (14a–c), with hestr (h)inn gamli 'this/the old horse' becoming (h)inn gamli hestr 'the old horse'. The initial stage, hestr (h)inn gamli, illustrated in (14a), has, besides the noun in D and the demonstrative in spec-dP, the adjective gamli in spec-NP. (Maybe we should rather merge the weakly inflected adjective to a lower dP, in accordance with what I take to be the locus of weak adjectives in modern Scandinavian. This detail is, however, not at stake here.) When the noun is no longer (regularly) fronted to D, there are two possibilities; (h)inn may remain in its old function (as long as articles are not obligatory) and maintain its status of specifier as in (14b), or it could be reinterpreted as a regular article and become a head as in (14c). In both cases it can also be moved to lexicalize the DP.



The grammaticalization is in neither of the cases demonstrated above a "grammaticalization downwards" in the sense that the demonstrative/article becomes associated with a lower projection than before. The only difference is the reinterpretation from specifier to head. And if we do not assume different noun phrase structures for Old and Modern Scandinavian, we can see that the definite suffix has remained the same from the stage of the language history which is focused in Faarlund 2007 and Lohndal 2007.

The pre-adjectival article (h)inn has disappeared. But it was, seemingly rather early, replaced by pen in Mainland Scandinavian. As I will return to in the next section, the demonstrative pen ( $< s\acute{a}$ ) actually went through the same grammaticalization process as did (h)inn. This means that the analysis of

(14c) corresponds well to what we can presume for *den gamle hest* 'the old horse' in modern Danish. In the double definiteness-languages, though, *pen* (> den) has lost its independent power to mark definiteness.

#### 6. (H)inn and pen in competition

When focusing on the language in Iceland and Norway in the 13<sup>th</sup> and 14<sup>th</sup> centuries, it may seem natural to regard, like e.g. Faarlund (2007), (h)inn as the normal pre-posed definite article. But as Faarlund also notes, (h)inn alternates with *pen* already in very early Norwegian manuscripts, e.g. *peim helga manni* DAT. 'the holy man' (Faarlund's example 19a), and in the long run, it is *pen* that survives as the only pre-posed article.

The explanation proposed by Faarlund (2007:36) is that the article *pen* derives from the demonstrative *pen* in constructions like *pau* in stóru skip 'those the large ships', with the demonstrative (here *pau*, agreeing with the neuter plural head noun) preceding the article (*h*)inn. This proposal is linked to the assumption that DP recursion became obsolete. "As a result (or a cause?!), the demonstrative took over the role of inn", as the author puts it.

However, a closer look at the development of the demonstrative  $s\acute{a}/pen$  in the Scandinavian mainland, from the beginning of the Viking Age and ahead, may lead to other conclusions. To start with, it is obvious that  $s\acute{a}$  loses much of its deictic power very early; it is very seldom used in formulations like "raised this stone" or "carved these runes", which are so common in the runic inscriptions. When we do find it in this function, it is often in very early inscriptions, as the one on the Rök stone, see (15). In later inscriptions, we normally find the demonstrative pessi ( $< s\acute{a}si$ , a reinforced  $s\acute{a}$ ) when an interpretation 'this/these' is necessary.

(15) Aft Væmoð standa runaR þaR. (Ög 136) after Væmoð stand runes these 'In the memory of Væmoð stand these runes.'

But this does not mean that  $s\acute{a}$  is not used at all. It is (of course) used as anaphoric pronoun in the forms that correspond to modern Swedish neuter singular det 'it' (< pet) and plural de 'they', but occasionally also in the masculine singular  $s\acute{a}$  and the feminine singular  $s\acute{a}$ , where we now have only han 'he' and hon 'she'. A less evident, but very common, use is as "supplementary" antecedent to a relative clause, see (16).

(16) Ek vilda kjósa mey þá er fegrst er í Þursheiminum. (N 192)
 I wanted choose maid DEM. REL. fairest is in Þursheim.
 I wanted to choose the maid who is the fairest in Þursheim.

Examples like the one in (16) should not be taken as evidence for a development of  $s\acute{a}$  towards a use as definite article in the usual sense. <sup>11</sup> Its connection to a following relative clause, or sometimes to a *that*-clause, is very clear, e.g. no less than 49 of a total of 79 instances of  $s\acute{a}$  in the Norwegian runic inscriptions appear in such contexts. (The rest is distributed on three normal demonstrative uses and 27 anaphoric pronouns.)

 $S\acute{a}$  before relative clauses and *that*-clauses may be associated with a "mediating" function, comparable to that of (*h*)*inn* before weak adjectives, the difference being that, in this case, the pronoun links an attributive clause (not an adjective) to the noun. It also happens, for that matter, that even (*h*)*inn* is used in this function too.

Now,  $s\acute{a}$  also appears, already in Viking Age runic inscriptions, in the mediating function above associated with (h)inn, i.e. before weak adjectives. A very interesting case is the inscription in (17), where the pre-adjectival function is fulfilled by both  $s\acute{a}$  (in the accusative form pan) and (h)inn in one and the same noun phrase.

(17) [...] respi sten [...] at Oþinkor [...] þan dyra ok hin drottinfasta.
... raised stone ... to Oþinkor ... DEM. valued and DEM. lord-loyal
'... raised the stone ... in memory of Oþinkor ..., the valued and loyal
to his lord.'
(DR 81)

The most plausible conclusion to draw from these early instances of pre-adjectival  $s\acute{a}/pen$  is that the original demonstrative went through the same kind of grammaticalization process as did the pre-adjectival (h)inn, cf. (14) above. This means that Old Scandinavian presumably had two competing free definite articles for some time; as we know, *pen* was the victorious one.

Initially, though, there was a regional variation; (h)inn was very dominating in Iceland and Norway, but not in other parts of Scandinavia. There are e.g. a dozen (h)inn, but no pre-adjectival  $s\acute{a}$  in the Norwegian runic inscriptions, whereas the Danish inscriptions show a handful of each. And there is a

<sup>&</sup>lt;sup>11</sup> Besides, the rune carver in this case already has access to the definite suffix; he writes *Pursheiminum*, translated to *Pursheim* in (16), but *-heiminum* is actually the definite form of *heim* 'home' in the dative: *heimi-num*. The literal meaning of *Pursheiminum* is 'the home of giants'. This is a very early instance of the definite form, from about 1100.

clear predominance for *pen* in mediaeval manuscripts from Denmark and Sweden. (Delbrück 1916:26 ff.)

My belief is that the already grammaticalized article *pen* was "imported" to Norway from south and/or east. I find this explanation more likely than a late reinterpretation of a demonstrative *pen* in contexts such as *pau in stóru skip* 'those the large ships'. If such expressions are rare, we should not exaggerate their importance for the change of article. If they are more common, we should ask ourselves why; at least modern Swedes make a very limited use of expressions like *dessa de stora skeppen*. Maybe the demonstratives in these instances are no demonstratives at all, but definite articles.

As mentioned above,  $s\acute{a}/pen$  had lost most of its original (N.B. proximal) deictic power already before the Middle Ages. My guess is that it was no longer used primarily as a demonstrative in Old Norse, but in its new functions, cf. above. This does not mean that an interpretation of the kind 'those the large ships' is not possible. But if the combination of  $s\acute{a}/pen + (h)inn$  appears with a remarkable frequency in Old Norse, the interpretation may be questioned. It could be that (h)inn had not really gained the status of an independent definite article, that it remained a pure pre-adjectival "mediator". In that case, a definite article  $s\acute{a}/pen$  could find its use in the same phrase.

If  $s\acute{a}/pen$  was ahead of (h)inn in the grammaticalization process, this might also explain why it won the competition, even on Norwegian ground. Perhaps (h)inn chiefly remained in its early developed mediating function, until it was phased out; maybe it actually was the pre-posed mediator (h)inn, not the article, that disappeared. Exactly why this happened is another question. But I am rather convinced it has nothing to do with a loss of DP recursion; (h)inn disappeared also in Icelandic, without  $s\acute{a}$  competing for the, supposedly, only D-position.

#### 7. Concluding remarks

In the preceding sections, I have discussed the relation between the definite suffix -inn and the definite article (h)inn in Old Scandinavian, the way they developed by means of grammaticalization, and, finally, the question of why

<sup>&</sup>lt;sup>12</sup> In modern Scandinavian, *den* can still be used deictically, but only as a distal demonstrative and when the right contextual support is at hand; *den där* ('that (one)', lit. that there) is otherwise the more expressive alternative. It can occasionally also work as an anaphoric demonstrative, but in most such cases the proximal (and stronger) *denna* ('this') is preferred.

mainland Scandinavian today uses *den*, not (*h*)*inn* as the definite article. All these issues have been treated by others before me in recent papers, but I have given new, and hopefully better, answers to the questions addressed.

There are different reasons why it is possible to come to so disparate conclusions. One is of course that the assumptions one makes for the abstract structure of noun phrases highly affect the result. But I would also like to emphasize the importance of the empirical approach. Focusing on a very limited period of time and not taking into account closely related varieties near by may be hazardous. In my research on the noun phrase of Old Scandinavian, I try to keep the perspective wide, in time as well as in space, and I believe felicitously.

It should also be clear from the above discussion that there are questions concerning the noun phrase in Old Scandinavian that have not yet had a satisfactory answer; the role of the weak adjectival declension is one. I hope to come up with new suggestions on this and other issues later on.

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