

Referential vs. non-referential null subjects in Middle Norwegian

Kari Kinn

This paper investigates the relationship between referential and non-referential null subjects in Middle Norwegian. It argues that overt, non-referential subject *det* arose before the loss of referential null subjects, contrary to the predictions of much previous work. A diachronic analysis compatible with the empirical findings is sketched out.

Keywords diachronic change, Middle Norwegian, null subjects, overt non-referential subjects, principles and parameters theory, syntax.

Kari Kinn, Department of Linguistics and Scandinavian Studies, University of Oslo, P.O. Box 1102, Blindern, 0317 OSLO, Norway. kari.kinn@iln.uio.no

1. INTRODUCTION

Like its contemporary Scandinavian sister languages, Old Norwegian allowed null (i.e. omitted) subjects. Non-referential subjects (NonRefSs) were always null, as in example (1).¹

- (1) ...*oc gerðe pro myrct*
and did [it] dark
'...and it became dark.' (The legendary saga of St. Óláfr (ÓSHL), 221476)

Referential subjects (RefSs) were mostly overt but could also be null, as in example (2).

- (2) a. *Siðan baðo þeir hann fræista oc vita ef pro satt være.*
then asked they him try and know if [it] true was
'Then they asked him to try to find out if it was true.' (ÓSHL, 221945)
- b. *margygr var pro kallat*
sea-ogress was [it] called
'It was called a sea-ogress.' (ÓSHL, 219002)

In Modern Norwegian, as in Swedish and Danish, both RefSs and NonRefSs must generally be overt, as illustrated in example (3). In most varieties of Norwegian, overt NonRefSs have the form *det* 'it'.

- (3) a. *Han sier at *(han) ikke kan komme.*
 he says that he not can come
 'He says that he cannot come.'
- b. *På søndag regnet *(det).*
 on Sunday rained it
 'On Sunday it rained.'

Null subjects in the history of Scandinavian have received an increased level of attention in recent years; see Sigurðsson (1993), Falk (1992, 1993a, 1993b), Håkansson (2008, 2013), Kinn (2010, 2011, 2014, 2016a, 2016b), Rosenkvist (2009), Faarlund (1990, 2012, 2013), Heltoft (2012), Walkden (2014), Lander & Haegeman (2014) and Kinn et al. (2016).² However, the previous studies mostly focus on EITHER RefSs or NonRefSs; they do not consider the relationship between the two subject types. When RefSs and NonRefSs are discussed in connection, some version of what I will refer to as the PREREQUISITE HYPOTHESIS is mostly assumed, implicitly or explicitly. The prerequisite hypothesis can be stated as follows:

- (4) THE PREREQUISITE HYPOTHESIS: The loss of null RefSs was a prerequisite for the rise of overt NonRefSs.

Although it is often adopted, the prerequisite hypothesis is not founded on empirical studies of data from the period in which Norwegian (as well as the other Scandinavian languages) changed into non-null-subject languages (non-NSLs). The main aim of this paper is, therefore, to test the prerequisite hypothesis against data from the Middle Norwegian period (ca. 1370–1550). I will argue that the prerequisite hypothesis, at least in a strong version (see Section 2), is not corroborated by evidence from Middle Norwegian. I will also sketch a new diachronic analysis of the loss of null subjects in Norwegian that is compatible with the empirical findings. The study is conducted within a generative framework, but in addition to theoretical issues, much attention will be devoted to the empirical results.

The paper is organised as follows: in Section 2, I discuss the prerequisite hypothesis in more detail. In Section 3, I present relevant Middle Norwegian data and show that they are not compatible with a strong version of the prerequisite hypothesis. In Section 4, I discuss a weak version of the hypothesis. In Section 5, I sketch out a diachronic analysis of the loss of null subjects in Norwegian. Section 6 concludes the paper.

2. THE PREREQUISITE HYPOTHESIS

The prerequisite hypothesis can be found in various works and is arrived upon on different grounds. In this section, I will provide some general remarks and

clarifications about the hypothesis, before I discuss how it is instantiated in Rizzi (1982), Håkansson (2008) and Faarlund (2012, 2013).

2.1 *Some general remarks and clarifications*

The prerequisite hypothesis, as stated in (4), is phrased in descriptive terms, but is consistent with central ideas of Principles and Parameters theory (P&P). More precisely, it can be derived from one of the implicational relationships stated in the original formulation of the null subject parameter (Rizzi 1982),³ namely that the presence of null RefSs implies the presence of null NonRefSs (more on this in Section 2.2). The idea of an implicational relationship between null RefSs and null NonRefSs has been widely accepted, also in recent works (see e.g. Roberts & Holmberg 2010:12), and it is corroborated by cross-linguistic empirical evidence. There is a very strong tendency for languages allowing null RefSs to also have null NonRefSs; Gilligan (1987) concludes that the implication seems to hold in a sample of more than 100 languages. In a more recent study, Nicolis (2008:291), who considers data from a range of Creole languages, states that the implication appears to be of an “absolute” nature.

It should be noted, though, that some (potential) counter-examples have been observed in the literature. One case is Övdalian, which allows null RefSs in the first and second person plural, but requires NonRefSs to be overtly realised (Rosenkvist 2010:236). Other cases are e.g. Old High German, Finnish and Dominican Spanish.⁴ In the latter languages, overt and null NonRefSs CO-EXIST (Axel 2007:295, 303, Hinzelin & Kaiser 2007, Nicolis 2008:276–277). Whether null subject systems of this type are actually counter-examples to the implicational relationship between null RefSs and null NonRefSs depends on whether one adopts a strong or a weak version of the implication. In what I will refer to as the strong version, a language that allows null RefSs will REQUIRE null NonRefs; there is, in other words, no room for overt NonRefs. In what I will call the weak version, languages with null RefSs will ALLOW null NonRefSs, but not necessarily require them; there is, in other words, room for some overt NonRefSs. Nicolis (2008) adopts the weak version; he is thus able to reconcile Finnish and Dominican Spanish data with the implication.⁵ Camacho (2013:42), on the other hand, operates with a stronger version and takes data of the Old High German/Finnish/Dominican Spanish type to indicate that the implication between null RefSs and null NonRefSs does not hold universally.

In this paper, my point of departure will be the STRONG version of the implicational relationship between null RefSs and null NonRefSs, and, accordingly, a strong version of the prerequisite hypothesis. The claim to be tested is thus the following: a language will not only allow but will also REQUIRE null NonRefSs as long as null RefSs are licit; consequently, no overt NonRefSs are found. There are two reasons why I use the strong version of the hypothesis as my starting point. First,

the strong version is the one that most immediately follows from the works to be discussed in the following sections, in particular from Rizzi (1982). Second, from a heuristic point of view, it is preferable start by testing the strongest prediction; the weaker version can then be taken into consideration if the strong version turns out not to hold. Note, however, that even a strong version of the prerequisite hypothesis is compatible with certain “subject-like”, non-referential elements. Crucially, though, such elements must have some identifiable linguistic function apart from that of being a subject (from the viewpoint of mainstream generative grammar, they must do something more than value the uninterpretable φ -features of T). Vietnamese has a non-referential element *nó* that has been argued to encode specificity (Greco et al. 2015). Non-referential *ele* in non-standard European Portuguese has been argued to be a type of discourse marker emphasising the illocutionary force of a sentence (Carrilho 2008). Elements like *nó* and *ele* do not conflict with the implication between null RefSs and null NonRefSs if we can safely assume that they are more than, or perhaps something else than, plain NonRefSs.

The distinction between the strong and the weak version of the prerequisite hypothesis concerns the predictions made for any given language synchronically. Before we move on, one point should be clarified with regard to diachronic predictions: the prerequisite hypothesis does NOT state that overt NonRefSs NECESSARILY arise in any language that loses null RefSs. However, IF overt NonRefSs arise in a language, we do not expect that language to be one that (still) allows null RefSs.

We now turn to the works of Rizzi (1982), Håkansson (2008) and Faarlund (2012, 2013) to see how the prerequisite hypothesis is instantiated there.

2.2 Rizzi (1982)

Rizzi (1982) does not discuss Scandinavian in detail but is relevant by virtue of being one of the most influential works in early P&P theory. Rizzi (1982) put forth the null subject parameter, whereby the null subject properties of a language are determined by the settings of two related parametric options, rendered in (5) (see Rizzi 1982:143):

- (5) a. INFL can be specified [+ pronoun].
 b. INFL can be referential.

INFL is, in Rizzi’s (1982) framework, subject-verb agreement. For any subject to be null, Ref or NonRef, INFL must be specified as [+ pronoun]. INFL being specified as [+ pronoun] is a sufficient condition for null NonRefSs; null RefSs, on the other hand, additionally require a positive setting of the parameter in (5b), stating that INFL can be referential.⁶ It follows that a language may have null NonRefSs but require RefSs to be overt; Rizzi (1982:143–144) mentions Icelandic, a variety of Dutch, and

certain northern Italian dialects, e.g. Paduan, as examples of this.⁷ Cf. example (6), from Paduan (Rizzi 1982:143):

- (6) a. *pro piove.*
 [it] rains
 ‘It rains.’
 b. **(El) viens.*
 he comes
 ‘He comes.’

The opposite pattern, whereby RefSs can be null, but NonRefSs are overt, is “excluded for intrinsic reasons (if an inflection cannot be pronominal, it cannot be referential either)” (Rizzi 1982:143). The typological prediction of Rizzi (1982) is thus clear, but it also entails a diachronic dimension: we would not expect a language to develop overt NonRefSs while still maintaining null RefSs. If null RefSs are licensed, the language should also be capable of licensing null NonRefSs. Overt NonRefSs would be unnecessary, and Rizzi (1982) offers no way of reconciling them with null RefSs.

2.3 Håkansson (2008)

Håkansson’s (2008) study focuses on null RefSs in Old Swedish; it also proposes a diachronic account of how null subjects were lost. In Håkansson’s analysis, the loss of null subjects followed from a change in the status of Spec-TP (Spec-IP in his terminology).⁸ According to Håkansson, Spec-TP changed from being an A’-position in Old Swedish to an A-position reserved for the subject at the modern Swedish stage. I will not discuss the details of the analysis here; the important point in the present context is the following: subjects, according to Håkansson (2008), can only be omitted from A’-positions. Thus, the change of Spec-TP from an A’ to an A-position not only implied obligatory movement of the subject from its base-generated position in the V-domain to Spec-TP, but it also implied that subjects could no longer be deleted from Spec-TP.⁹ Håkansson (2008:225) proposes a scenario in which the transition of Spec-TP into a pure subject position happened in three stages, summarised in (7):

- (7) 1. Subjects of transitive verbs began to move obligatorily to Spec-TP.¹⁰
 2. The rule in 1 was generalised to ALL RefSs, causing movement of all RefSs from their base-generated, VP-internal position.
 3. The rule in 2 was further extended in the sense that OVERT NONREFSs were generated in Spec-TP. This is the situation in Modern Swedish.

As is evident, overt NonRefSs do not enter the scene until the last stage, after the changes regarding RefSs are completed. Obligatory overt RefSs can thus be seen as a prerequisite for the rise of overt NonRefSs. According to Håkansson (2008:225), the model in (7) can also be applied to Modern Icelandic: Modern Icelandic has only

completed the two first stages, which is why RefSs are obligatorily overt, whereas NonRefSs are not.

2.4 Faarlund (2012, 2013)

Faarlund (2012, 2013) discusses null arguments in the history of Scandinavian and other languages. He treats null arguments as inherently silent pronouns whose presence or absence in a language is independent of the functional categories of the clause; the (im)possibility of null arguments only reflects properties of the pronominal system itself.¹¹ Faarlund adheres to common generative terminology in calling silent pronouns *pro*, but as opposed to Rizzi (1982, 1986) and much subsequent work, he does not assume any particular syntactic licensing conditions (like pronominal INFL).

According to Faarlund, *pro* is a lexical item that must be robustly represented in the primary linguistic data (PLD) to be acquired. If the frequency of *pro* drops below a certain threshold, it will not be picked up by children during language acquisition, and a new grammar with only overt pronouns will emerge. In Mainland Scandinavian, Faarlund argues that the frequency of *pro* started to drop because of the weakening of subject-verb agreement morphology: although *pro* was not syntactically conditioned by subject-verb agreement, the agreement morphology did promote recoverability of *pro* on a pragmatic level. When the agreement morphology was weakened, overt pronouns became a more preferable option for communicative reasons. This made the frequency of *pro* drop below the critical level, which in turn led to its loss.

Faarlund (2012, 2013) does not propose a stepwise loss of null subjects; in his account, both referential and non-referential *pro* were lost simultaneously in the history of Scandinavian. Thus, according to Faarlund, the loss of null RefSs was not directly a condition for the loss of null NonRefSs. Still, Faarlund's works are relevant in the context of the prerequisite hypothesis: the frequency changes that triggered the loss of all null subjects must have started with null RefSs. This follows from the fact that null NonRefSs in Old Norwegian did not have overt counterparts. When overt NonRefSs were not a part of the lexicon, speakers cannot have chosen overt NonRefSs simply as a matter of preference, for communicative reasons.

In terms of variation between overt and null subjects, the predictions made by Faarlund's account are, in practice, the same as those made by Rizzi (1982) and Håkansson (2008). In a text produced by a single grammar, we may expect to find null NonRefSs, although there are no null RefSs. This type of output is produced when *pro* is still a part of the lexicon, but the speaker opts for overt pronouns when these are readily available, i.e. in the referential contexts. We do NOT expect overt NonRefSs to co-occur with null RefSs. *Det* 'it' is not reanalysed as an overt NonRef until *pro* is gone (Faarlund 2013:272), and when *pro* is gone, null RefSs are no longer possible.

Having shown how (versions of) the prerequisite hypothesis is instantiated in some works on null subjects, I will now discuss whether it captures the situation that can be observed in Middle Norwegian.

3. EVIDENCE FROM MIDDLE NORWEGIAN

3.1 *Middle Norwegian data*

Middle Norwegian (ca. 1370–1550) is, as previously mentioned, the language stage between Old and Modern Norwegian. The syntax of Middle Norwegian in many ways resembles that of Old Norwegian (Mørck 2013:669): it is V2 in the sense that the finite verb seems to move to C in main clauses. Like in Old Norwegian, verb-initial declarative main clauses are rather common. In subordinate clauses, however, there is variation between the Old Norwegian word order, which in most cases means V-to-T movement (Faarlund 2004), and the Modern Norwegian word order, in which the verb is commonly analysed as in situ (Vikner 1995:140, Vittersø 2004).

I have investigated a sample of 136 Middle Norwegian charters from the *Diplomatarium Norvegicum* (DN). The charters date from the period 1371–1548. The documents in my sample exhibit a low degree of influence from Swedish and Danish, and many of them have a high proportion of narrative contents in addition to the usual introductory and concluding formulas (the *PROTOCOL* and the *ESCHATOCOL*). I take the view that formulaic contexts must not necessarily be disregarded as linguistic evidence (see Grøtvedt 1961:225 and Mørck 2011:41); however, none of the examples discussed in this paper are formulas.

In most cases, we can safely assume that a charter is the work of one individual scribe (Wetås 2008:89). It can be rightfully asked, however, whether this means that the charter is a reflection of a single grammar, or I-language (Chomsky 1986). The question is important, as the aim of this study is to investigate the compatibility, or incompatibility, of null RefSs and overt NonRefSs within individual grammars.

Following Kroch (1989), many works in historical syntax have adopted the idea that a single speaker may have two or more competing grammars, which can all underlie the production of one individual text. I adhere to the view that speakers may have more than one grammar, and that this may result in intra-textual syntactic variation. As Roberts (2007:331) and Walkden (2014:24–25) point out, however, it is problematic to invoke grammar competition without identifying any functional motivation for switching between grammars. It is not random whether a bilingual speaker in a given context chooses to use, say, German or French. The competition between two grammars that are more similar, like an Old English grammar with a head-initial vs. a head-final TP (see e.g. Pintzuck 2002), is not fundamentally different; we would expect the choice of grammar in every given context to be

guided by stylistic, sociolinguistic or other functional factors. The charters that I have investigated are, mostly, short documents, rarely exceeding a couple of pages, treating one specific matter. Abstracting away from the question of formulas, I find it hard to justify the idea of competing grammars being at work in such contexts, unless there is specific and independent evidence of this.¹² My default assumption is thus that all syntactic phenomena occurring within a single charter can be derived by a single grammar.

With a few exceptions, I have only considered variation between overt and null subjects within individual charters. This leaves us with a rather limited set of relevant data, as the documents must exhibit a very specific combination of properties to qualify as evidence: not only must they contain a null RefS, which is a rather low-frequency phenomenon in Middle Norwegian (see Mørck 1990 and Kinn 2016a, 2016b); they must also exhibit a syntactic environment in which an overt NonRefS can potentially occur. However, although demanding much of the data, the method has an important advantage: it minimises the risk of attributing the properties of different varieties/dialects to a single I-language.

3.2 Co-occurrences of overt, non-referential subjects and referential null subjects

My data set contains 33 instances of (the precursor of) *det* 'it', often spelled *thet*, that I have analysed as overt NonRefSs.¹³ Contrary to the predictions of the strong prerequisite hypothesis, I have found that NonRef *det* DOES co-occur with null RefSs. Due to the nature of my data and methodology, the instances are too few to make meaningful statistical generalisations, but as existential evidence, my findings should be clear enough.¹⁴ Some relevant data are rendered in the example pairs in (8)–(12). The examples labelled *a* contain null RefSs, whereas the ones labelled *b* contain overt NonRefS. The examples in each pair are taken from the same individual charter. Consider, first, example (8):

- (8) a. *þa vilium vy han greide lighe gøra sem pro os ber*
 then will we him readily do as [he] us asks
 'Then we will readily do as he tells us.' (DN II 683, 1425)
- b. *er þet sua ad yder nadh vill eingheleidhes annet vtthen þet at*
 is it so that your honour wants by.no.means other but that that
vy skulum han endelighes til fugut hafua þa vilium vy honom ey
 we shall him definitely to bailiff have then will we him not
vt køyre vthen vy vilium fly vt af lænet
 out drive but we will flee out of county.the
 'If it is so that your honour wants absolutely nothing else than for him to be our bailiff, we will not drive him out, but we will flee the county.' (DN II 683, 1425)

The null RefS in example (8a) is found in a subordinate clause; this shows that we are not dealing with topic drop/discourse ellipsis of the type found in Modern Norwegian (see note 1). The construction with *det* (spelt *þet*) will be discussed in more detail in Section 3.3; observe, however, that *þet* occurs in a post-verbal position. This means that it cannot be analysed as an expletive topic of the type found in Modern Icelandic, i.e. as an element that can only fill the preverbal position of declarative main clauses (see Section 3.3.1, Faarlund 1990 and Thráinsson 2007:312).

In example (9a), the null RefS occurs in a main clause;¹⁵ the overt NonRef pronoun *thet* in (9b) is found in a conditional subordinate clause:

- (9) a. *Thet se ollom godhom monnom kunnikth at meer ... warom a*
 that is.SBJV all good men known that we ... were at
Alme som ligger i Wardaal ... oc hørdom a ord oc lysingh
 Alm which lays in Vardal ... and heard on word and declaration
oc fullo vidhergongo | veithæ pro fyrir okker til vithnis sculde
 and full confession | gave [they] for us to testimony should
wara ath ...
 be that ...
 'It shall be known to all good men that we were at Alm in Vardal and heard a declaration and a full confession. They testified for us that ...' (DN X 217, 1457)
- b. *baud oc Herleiker ader nemdom Siugurde waare thet swa at honom*
 offered too Herleik aforementioned Sigurd were it so that him
tektis koma heim til honom a Skierffeim i Wardaale sitia ther i
 pleased come home to him at Skjerveim in Vardal sit there in
hwse nær honom tha wilde han hielpæ honom
 house near him then would he help him
 'Herleik also offered the aforementioned Sigurd this: if it would would please him to come to Skjerveim in Vardal and live with him in the house, then he would help him...' (DN X 217, 1457)

In example (10), the null RefS occurs in a main clause. The overt NonRef *thet* is found in an impersonal passive construction:

- (10) a. *Oc hafde pro thet i æydhæ sinom at...*
 and had [he] that in oath his that...
 'And he said in his oath that...' (DN I 859, 1462)
- b. *...oc swærie wil om thet gørs behof*
 ...and swear will if it is.made need
 '...and she will swear it if necessary.' (DN I 859, 1462)

In example (11a), the null RefS is again found in a main clause, as is the NonRef *thet* in (11b).^{16 17}

- (11) a. *Edher mynom wirdeligom oc høgbornom fførste konungh Hans ... helser*
 You my worthy and highborn first king Hans ... greet
jac Gwnnar Sylwestersson ffwller oc laglegghen wmbodz man a
 I Gunnar Silvestersson, full and lawful commissary on
hederligh mandz wegna her Andhrs Mws ... | hawer pro mik beffallet
 honorable man's behalf mister Anders Mus ... | has [he] me ordered
prof ad thaka ...
 testimony to take ...
 'I, Gunnar Silvestersson greet you, my worthy and and high-born first king Hans.
 I am a lawful commissary on the behalf of the honourable man Anders Mus. He
 has ordered me to take a testimony ...' (DN II 1016, 1501)
- b. *thet ær swa myrkt*
 it is so dark
 'It is so dark.' (DN II 1016, 1501)

Consider, finally, example (12):¹⁸

- (12) a. ... *och kommer han druckin, skal pro bõthe ij owra* ...
 ... and comes he drunk shall [he] pay 2 ounces.of.silver ...
 'And if he shows up drunk, he shall pay 2 ounces of silver.' (DN I 1018, 1506)
- b. *Item ær thet nogen som thessæ fforscreffne sticke vppo taler...*
 likewise is it someone that this for.written piece upon speak ...
 'Likewise, if there is someone who reproves what we prescribe ...' (DN I 1018,
 1506)

The null RefS in example (12a) is found in a main clause. The preverbal position is occupied by a conditional subordinate clause; again, we see that null RefSs in Middle Norwegian do not obey the distributional restrictions that apply to the modern discourse ellipsis.¹⁹ The overt NonRef *thet* in (12b) is found in the postverbal position of a particular type of existential construction (Faarlund et al. 1997:1093). The construction bears resemblance to a cleft in that it involves a subordinate clause introduced by *som* 'that, who'. Unlike prototypical clefts, however, the function of the construction is not to pick out and focus a referent; rather, it states (or, in this case, hypothesises) the existence of somebody. The existential nature of the sentence is underpinned by the fact that it is most naturally translated into English with *there*, not *it*.²⁰

Having presented evidence that null RefSs and overt NonRefSs co-existed in Middle Norwegian, contrary to the strong version of the prerequisite hypothesis, I will now discuss the properties of overt NonRefSs in Middle Norwegian in some more detail.

3.3 NonRefSs with special functions?

A way of reconciling overt NonRef *det* in Middle Norwegian with the strong version of the prerequisite hypothesis could be to assume that NonRef *det* 'it' was not a "pure" non-referential subject before the loss of null RefSs, but rather had some other function (see Section 2.1). In this section, I will discuss that possibility. In the literature on overt NonRefSs in Scandinavian, relevant proposals have been put forth by Faarlund (1990) and Falk (1993a, 1993b): Faarlund claims that NonRef *det* 'it' was initially an expletive topic, while Falk suggests that it was initially a quasi-argument only and later also a marker of the existential construction. I will argue that none of the proposals can fully account for the situation in Middle Norwegian and that the status of the prerequisite hypothesis thus remains dubious.

3.3.1 Expletive topics

Faarlund (1990) suggests that overt NonRefSs started out as expletive topics of the type found in Modern Icelandic. Expletive topics have the function of satisfying the V2 rule, and they can, as previously mentioned, only occur in the preverbal position (Spec-CP) of declarative main clauses. Cf. the Modern Icelandic example (13) (Faarlund 1990:190):

- (13) a. *Það eru mýs i baðkerinu.*
 it are mice in bathtub.the
 'There are mice in the bathtub.'
- b. **Í gær voru það mýs i baðkerinu.*
 Yesterday were it mice in bathtub.the
 'Yesterday there were mice in the bathtub.'

Faarlund's account predicts the earliest instances of NonRef *det* appear in Spec-CP. However, his proposal is only backed up with data from the end of the 15th century onwards, mostly written by Danish authors; Faarlund has not investigated Middle Norwegian. We have already seen that NonRef *det* in Middle Norwegian is not restricted to Spec-CP in main clauses (cf. again examples (8b), and (12b)). The study of Kinn (2010) indicates that these cases are not exceptional: in Kinn (2010), all instances of NonRef *det* from the 15th and 16th century are found either post-verbally in main clauses, or in subordinate clauses (Kinn 2010:110). Empirical evidence thus indicates that Faarlund's (1990) proposal is on the wrong track: overt NonRefSs did not start out as expletive topics, and co-occurrences of overt NonRef *det* and null RefSs cannot be ascribed to the presence of this grammatical element.

3.3.2 Quasi-arguments

Falk (1993a, 1993b) distinguishes between quasi-argumental and expletive NonRefSs and proposes that NonRef *det* in Swedish was used for quasi-arguments before it took on the function of a general NonRefS.²¹ Quasi-arguments are typically subjects of meteorological, or “atmospheric”, expressions (Rizzi 1986) but can also occur with predicates that denote what Faarlund et al. (1997:679) call “a situation or event that is perceived”, or “states or processes” (Falk 1993a:80). Although being NonRef, quasi-arguments are assigned an external theta-role, a property they share with RefSs (see Chomsky 1981:323ff, Rizzi 1986, Bennis 1986, Vikner 1995:224). In Falk’s analysis, their “dual” status is the reason why quasi-arguments could be expressed overtly at a particularly early stage: if a quasi-argument was interpreted as being basically NonRef, it would be null. However, if it was interpreted as being basically argumental, like referential subjects, it could be overt (Falk 1993a:236–237).

Interestingly, many of the early occurrences of overt NonRefSs in Middle Norwegian are quasi-arguments. This is the case in examples (8b) and (9b), which instantiate what I will refer to as the *det så* construction. For convenience, I repeat the relevant parts of example (8b) in (14):

- (14) *Er þet sua ad yder nadh vill eingheleidhes annet...*
 is it so that your honor wants by.no.means other
 ‘If it is so that your honour wants absolutely nothing else...’ (DN II 683, 1425)

The *det så* construction contains a non-referential *det* (*þet* in 14), the pro-adjective *så* ‘so/like this’ (spelt *sua* in (14) and a subordinate clause, often introduced by the complementiser *at* ‘that’ (*ad* in (14)). The pro-adjective *så* is oppositionally related to the subordinate clause; Falk (1993a:211), describing the same construction in Swedish, writes that “... *så* receives its referential content from the following *att*-clause.” *så* and the subordinate clause constitute a predicate that denotes “a situation or event that is perceived” (Faarlund et al. 1997:679), and I take it that this type of predicate can assign a quasi-theta role. In the period up until 1450, I have found six instances of NonRef *det*, all of which occur in the *det så* construction.²² This suggests that not just any quasi-argument could be overt at the earliest stage; I return to this issue in Section 3.3.3.

Det (*thet*) is also clearly a quasi-argument in example (11b), repeated below in (15), which is a meteorological expression.

- (15) *thet ær swa myrkt*
 it is so dark
 ‘It is so dark.’ (DN II 1016, 1501)

It is worth noting that the charter containing the overt quasi-argument in (15) also exhibits a potential instance of a null expletive.²³

Cf. example (16):

- (16) *masske tik idrer thu sælde ffadher mynom then hesten*
 maybe you.ACC regret you sold father my that horse
 ‘Maybe you regret that you sold that horse to my father.’ (DN II 1016, 1501)

The analysis of example (16) depends on the status of the oblique argument *tik* ‘you’. According to e.g. Rögnvaldsson (1995), Haugan (1998), Barðdal & Eythórsson (2003) and Eythórsson & Barðdal (2005), Old Norse had oblique subjects; if that assumption is correct and can be extended to Middle Norwegian, *tik* is a subject, and there is no null expletive in (16). However, Mørck (1994) and Faarlund (2001, 2004:194–195, n. 1) argue that Old Norse and Middle Norwegian did NOT have oblique subjects. If Mørck and Faarlund are correct, it may be argued that an expletive *pro* is present in (16), as illustrated in (17) (see e.g. Faarlund 2013).

- (17) *masske pro tik idrer thu sælde ffadher mynom then hesten*
 maybe [it] you.ACC regret you sold father my that horse
 ‘Maybe you regret that you sold that horse to my father.’ (DN II 1016, 1501)

A less ambiguous case of an overt quasi-argument co-occurring with a null expletive is found in example (18).²⁴ (This charter does not additionally exhibit any null RefSs.)

- (18) a. *Ær thet oc xxxj aar sidhen ath kþupeth war giorth*
 is it too 31 years since COMP bargain.the was made
 ‘Also, the deal was made 31 years ago.’ (DN VI 723, 1534)
- b. *...med fterom godhom mannom som pro icke nw ær tydh ath reckne*
 with more good men COMP [it] not now is time to name
 ‘... with more good men, who there is no time to name now.’ (DN VI 723, 1534)

Co-occurrences of overt quasi-arguments and null expletives within the same, individual charter can be taken to suggest that quasi-arguments were overtly realised earlier than expletives. The argument is corroborated by the fact that I have not found any instances of the opposite pattern, whereby overt expletives would co-occur with null quasi-arguments. However, in the context of the prerequisite hypothesis, the important question is whether quasi-arguments are the ONLY overt NonRefSs that co-occur with null RefSs. This is not the case; recall from Section 3.2 that overt NonRefSs are also found in impersonal passives and existential constructions, while RefSs within the same individual documents are still null. For convenience, I repeat example (10b), which is an impersonal passive, and example (12), which is a type of existential, in (19):

- (19) a. ...*oc swærie wil om **thet** gørs behof*
 ...and swear will if it is.made need
 ‘...and she will swear it if necessary.’ (DN I 859, 1462)
- b. *Item ær **thet** nogen som thessæ fforscreffne sticke vppo taler...*
 likewise is it someone that this for.written piece upon speak ...
 ‘Likewise, if there is someone who reproves what we prescribe ...’ (DN I 1018, 1506)

To sum up this section, we have seen that quasi-arguments are expressed overtly at a particularly early stage in the history of Norwegian. However, in the context of the prerequisite hypothesis, the crucial question is whether quasi-arguments are the ONLY overt NonRefSs that co-occur with null RefSs. This is not the case; we have seen that overt expletives too are found in charters exhibiting null RefSs. Thus, although the distinction between quasi-arguments and expletives is relevant in the history of overt NonRefSs in Norwegian, it is not enough to save the prerequisite hypothesis.

3.3.3 Construction markers

In addition to expressions with quasi-arguments, Falk (1993b, 1993a) observes another context in which NonRef *det* could occur in Swedish before it became a general NonRefS, namely existential constructions. NonRef *det* was, according to Falk, a CONSTRUCTION MARKER, i.e. pragmatic signal of existentials (see in particular Falk 1993b:165).

The idea of *det* as a construction marker in Falk’s sense in Middle Norwegian is only meaningful if the presence of an overt *det* distinguishes the existential construction from other constructions. As I have shown, by the second half of the 15th century, NonRef *det* appears as a quasi-argument and in existentials, as well as in impersonal passives. This range of contexts seems too wide to justify a construction marker analysis.²⁵ I repeat the impersonal passive in example (19) in example (20):

- (20) ...*oc swærie wil om **thet** gørs behof*
 ...and swear will if it is.made need
 ‘...and she will swear it if necessary.’ (DN I 859, 1462)

It is worth noting that as a more general concept, the idea of *det* as a construction marker is actually relevant in early Middle Norwegian. The relevant construction is, however, not the existential construction, but the *det sâ* construction, discussed in Section 3.3.2. As mentioned, the *det sâ* construction involves a quasi-argument; I repeat the relevant parts of example (14) in (21):

- (21) *Er þet sua ad yder nadh vill eingheleidhes annet*
 is it so that your honour wants by.no.means other
 'If it is so that your honour wants absolutely nothing else...' (DN II 683, 1425)

Up until 1450, I have only found overt, NonRef *det* in the *det sã* construction; other NonRefSs, including other quasi-arguments, are always null. Thus, we can discern a stage at which NonRef *det* is a marker of the *det sã* construction BEFORE it became generally licit as a quasi-argument. This, however, only accounts for a subset of the quasi-argumental occurrences of *det*, not for any of the overt expletives that co-occur with null RefSs.

To sum up this section, we have seen that Falk's (1993b, 1993a) idea of *det* as a marker of the existential construction cannot fully reconcile the distribution of NonRef *det* in Middle Norwegian with the prerequisite hypothesis. I have not been able to spot any alternative functions that NonRef *det* in Middle Norwegian might have had, apart from that of being a subject.²⁶ My conclusion is, therefore, that the prerequisite hypothesis, at least in its strong version, cannot be reconciled with the behaviour of NonRef *det* in the history of Norwegian.

4. A WEAK VERSION OF THE HYPOTHESIS

In the previous section, I argued that co-occurrences of overt NonRefSs and null RefSs cannot be reconciled with the strong version of the prerequisite hypothesis. This introduces the question of whether a weaker version of the hypothesis would be compatible with the data. By a weaker version, I mean a version according to which a language with null RefSs may allow some overt NonRefSs, as long as it also permits null NonRefSs (see Section 2.1).

In Sections 3.3.2 and 3.3.3, I briefly touched upon a fact of relevance to the weak version of the prerequisite hypothesis, which I will discuss in some more detail here: within individual charters, we may encounter co-occurrences not only of overt NonRefSs and null RefSs but also of NULL AND OVERT NONREFSs. Cf. examples (22) and (23) for evidence of variation between null and overt NonRefSs:

- (22) a. *bættar haffde þro tik wæred hemæ*
 better had [it] you.ACC been home
 'You would have been better off at home.' (DN II 1016, 1501)
- b. *þæt ær swa myrkt*
 it is so dark
 'It is so dark.' (DN II 1016, 1501)

- (23) a. ...*ath offthe och tiidom haffuer pro waret klaget och kiert*
 ...that oft and oft has [it] been complained and complained
ffor riigens raadh vppo then onde och sløme ssiidwænie ssom
 before kingdom's council upon the vicious and bad custom that
hær ær innan Ffrostotyngs laga med daarheyt oc drwkkenskap
 here is within Frostating's jurisdiction with foolishness and drunkenness
vppo ffylkes tyngom...
 upon county assembly
 '...that there have been many complaints to the State Council about the
 vicious custom that exists here in the jurisdiction of Frostating, which involves
 foolishness and drunkenness in the county assembly...s' (DN I 1018, 1506)
- b. *Item ær thet nogen som thessæ fforscreffne sticke vppo taler...*
 likewise is it someone that this for.written piece upon speak ...
 'Likewise, if there is someone who reproves what we prescribe ...' (DN I 1018,
 1506)

Example (22a) instantiates a null quasi-argument, while (22b) shows an overt quasi-argument within the same, individual document. In example (23), the NonRefSs are expletives; (23a) contains a null expletive in an impersonal passive, while (23b) contains an overt expletive in an existential construction. The data in (22)–(23) indicate that Middle Norwegian did allow null NonRefSs in some cases even after the introduction of overt NonRefSs. Thus, the Middle Norwegian data are compatible with the weak version of the prerequisite hypothesis.²⁷

However, even though the weak version of the hypothesis is descriptively adequate, it is important to be aware that it leaves some important questions unanswered. The most fundamental one is perhaps the following: when both null and overt NonRefSs were possible, which factors influenced the distribution of the two options? As mentioned, with the exception of the *det så* construction and perhaps also other quasi-arguments in early Middle Norwegian, I have not been able to spot any special functions associated with overt NonRefSs. There are two ways of interpreting this: either overt and null NonRefSs were in free variation, i.e. there was no interpretive difference between the two options (“true optionality” in the sense of Biberauer & Richards 2006). Alternatively, we may assume that there was in fact a difference, but that it is not easily detectable in the preserved Middle Norwegian data. In what follows, I will briefly discuss the two options.

According to Biberauer & Richards (2006), null and overt NonRefSs are in free variation in Faroese and Afrikaans. Free variation in other Germanic varieties may be taken as corroborating evidence of free variation in Middle Norwegian. However, conceptually, the idea of free variation is not uncontroversial, at least if “free” is taken to mean that there are not even subtle, contextual (e.g. scope-related, pragmatic, or stylistic) differences between the two options. In linguistic theory, it is often assumed that different lexical items with the exact same meaning do not occur in natural languages; this is due to blocking effects (see e.g. Aronoff 1976

and Kroch 1994).²⁸ Many syntacticians take the view that blocking effects prevent not only different WORDS with the exact same meaning but also different syntactic derivations. This follows directly from the basic assumption that derivations are driven by FEATURES, which are items of the lexicon (e.g. Baker 2008; more on this in Section 5.1). The restriction on semantically vacuous variation is also stated on slightly different grounds by e.g. Reinhart (1995), Fox (2000), and Chomsky (2001) (see Walkden 2014:23ff for discussion). If we assume free variation between null and overt NonRefSs, we would have to admit an exception to a theoretical principle which seems otherwise well founded.

Another issue that arises if we assume free variation between overt and null NonRefSs concerns the Avoid Pronoun principle (Chomsky 1981). The Avoid Pronoun principle can be stated as follows:

(24) Avoid overt pronoun, whenever possible. (Frascarelli 2007:694)

Chomsky (1981:65) originally proposed the Avoid Pronoun principle in a discussion of PRO vs. overt pronouns but takes the view that it might be a more general “principle of grammar”. It has indeed been treated as such in the subsequent literature; the Avoid Pronoun principle is often alluded to both in the context of RefSs and NonRefSs. The fact that overt, referential subject pronouns are pragmatically marked, while null subjects are unmarked in e.g. Italian falls out of Avoid Pronoun, as does the non-existence of overt NonRefSs in that language (see, among many others, Hyams 1987, Lebeaux 1987 and Frascarelli 2007). However, if the variation between overt and null NonRefSs in Middle Norwegian is free, the Avoid Pronoun principle cannot apply: if there is free variation, it is possible to avoid overt pronouns; still, speakers use overt NonRefSs.^{29 30}

The alternative to assuming free variation between null and overt NonRefSs in Middle Norwegian would be to postulate differences that are not observable, or at least hard to spot, due to the nature of the available data. It is difficult to exclude this possibility entirely; as Walkden (2014:27) states, “our inability to perceive the conditions on variation does not mean that those conditions do not exist.” If we commit to the view that variation between null and overt NonRefSs is in fact NOT free, even though we cannot identify the conditions, we can, in principle, rescue the strong version of the prerequisite hypothesis. As mentioned, even the strong version of the prerequisite hypothesis allows overt NonRef pronouns in Middle Norwegian if the overt, NonRef pronouns are somehow “more” than just subjects. By rejecting free variation, we implicitly say that one of the options must encode something more than just subjecthood. The most obvious assumption would be that the innovative, overt forms have some kind of additional function; if this is correct, they would be compatible with null RefSs in the same way that construction markers are in the analysis of Falk (1993a, b).

In practice, however, taking this approach would force us to dismiss the empirical evidence presented in [Section 3.2](#) on purely theoretical grounds. That would, in my view, not be methodologically sound. I therefore maintain that as it stands, the Middle Norwegian data qualify as counter-evidence to the strong version of the prerequisite hypothesis.³¹

Summing up this section, then, I have argued that a weak version of the prerequisite hypothesis is compatible with the Middle Norwegian data. However, the weak version also raises certain theoretical and methodological issues of a rather fundamental nature. It is beyond the scope of this paper to discuss these issues in any more detail; in the following, I will instead return to the diachronic development in Middle Norwegian and sketch a diachronic analysis.

5. SKETCH OF A DIACHRONIC ANALYSIS

5.1 *On the notion of parameter*

The behaviour of NonRef *det* in Middle Norwegian is unexpected in the context of the null subject parameter of Rizzi (1982). It can thus be seen as counter-evidence against P&P theory more generally – at least P&P in its original formulation (Chomsky 1981). As a consequence of this, the diachronic account that I would like to sketch here is not based on P&P in the “classical” sense. Instead, it is set in the framework of what I will refer to as MODERN PARAMETRIC THEORY (see e.g. Roberts 2012), where the notion of parameter is substantially different from that developed in the 1980s.

A basic assumption of modern parametric theory is the so-called Borer-Chomsky Conjecture (BCC), according to which the locus of parametric variation is the lexicon: parametric differences are a result of the presence or absence of features on lexical items, including functional categories like C and T (Baker 2008:353). Importantly, parametric options and implicational relationships are not given by UG; rather they follow from interaction of all the three factors in language design proposed by Chomsky (2005): the genetic endowment (i.e. UG), experience (i.e. the PLD) and so-called third factor principles, which are innate capacities not specific to the faculty of language.³²

The more recent notion of parameter allows for more flexibility than Rizzi’s (1982) proposal. In modern parametric theory, the null subject properties of a language (or absence thereof) are not determined by the features of one particular lexical item, rather, they result from the featural make-up of functional categories in combination with the featural make-up of pronouns (Biberauer 2008:50). In the following, I will argue that the featural make-up of pronouns has played a particularly important role in the history of null subjects in Norwegian, in a way that is compatible with the data presented in [Section 3](#).

Number	Person	Strong verb	j-stem	a-stem	i-stem
Sg.	1	fer	kref	kasta	dómi
	2	ferr	krefr	kastar	dómir
	3	ferr	krefr	kastar	dómir
Pl.	1	fǫrum	krefjum	kǫstum	dómum
	2	farið	krefið	kastið	dómið
	3	fara	krefja	kasta	dóma

Table 1. Old Norwegian verbal inflections, present indicative.

5.2 DP vs. φ Ps pronouns and pronoun deletion

To account for how a language develops diachronically, it is necessary to make explicit assumptions about its synchronic nature. I will therefore clarify some points regarding the analysis of null subjects in Old Norwegian before I turn to the question of diachronic change. I will focus on issues that are immediately relevant to the relationship between RefSs and NonRefSs; for extensive discussions, cf. Kinn (a, b).

As briefly mentioned in footnote 6, there are weighty reasons to assume that null subjects in Old Norwegian were not directly licensed by subject-verb agreement. First, even though both subject-verb agreement and null subjects were lost in the transition into Modern Norwegian, the relative chronology between the changes does not indicate any direct, causal relationship: the loss of null subjects basically started while subject-verb agreement was still retained (Kinn 2011; cf. Håkansson 2008, 2013 for similar conclusions regarding the loss of null subjects in the history of Swedish). Second and relatedly, Old Icelandic, which is very closely related to Old Norwegian, eventually lost null subjects WITHOUT any concomitant weakening of subject-verb agreement (Sigurðsson 1993). Third, Old Norwegian, like other early Germanic languages, allowed null OBJECTS without having any object-verb agreement (Sigurðsson 1993, Walkden 2014). Fourth, in Old Norwegian, null subjects are virtually always third person and almost never first and second person (more on this below), but third-person forms of finite verbs do not have any more distinct agreement morphology than the first and second persons, as we would perhaps expect if subject-verb agreement acted as a syntactic licenser. Cf. Table 1, based on Faarlund (2004:49–53) and Spurkland (1989:124).

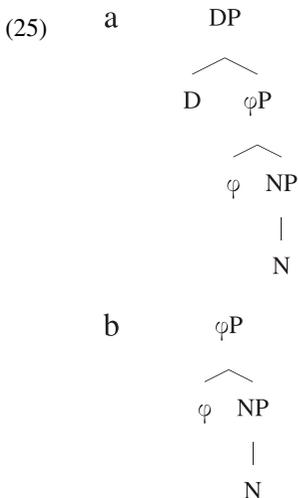
The asymmetry between the first and second persons on the one hand versus the third person on the other is the point of departure of the syntactic analysis that I will assume here. Note that the division between the grammatical persons is very clear in Old Norwegian: while a PREFERENCE for the third person has been observed in discussions of null subjects in other early Germanic languages (e.g. Old High

German; see Axel 2007:315), the Old Norwegian data seem to suggest something more than a quantitative tendency. As compared to third-person null subjects, across genres, first- and second-person null subjects are so rare that both the philological literature and more recent, generative works assume the existence of a grammatical rule that prevents them (see Nygaard 1894: 1905 and Faarlund 2012, 2013); Kinn (2016a:126ff) provides quantitative and paleographic evidence in favour of this view.

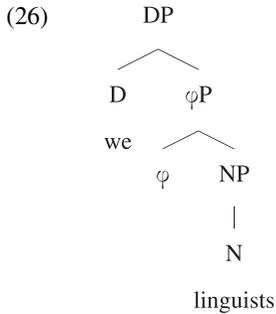
The question is, then, what it is that prevents deletion of pronouns in the first and second persons. I will argue that the answer can be found in the featural make-up of these pronouns.³³

It is well known that pronouns differ in terms of syntactic category and internal structure, both cross-linguistically and within individual languages (Cardinaletti & Starke 1996, 1999, Déchaine & Wiltschko 2002, Höhn 2015). One of the points that varies is whether a pronoun can function as a determiner, i.e. take a lexical noun as (a part of) its complement. Déchaine & Wiltschko (2002), whose framework I am adopting, distinguish between DP and φ P pronouns, of which only the first type may function as determiners.

In terms of internal structure, the crucial difference between DPs and φ Ps is that DPs have a D-feature that heads a D-projection, or D-layer, as illustrated in (25a). The D-feature is not present in φ Ps; cf. (25b):



The D-layer makes DP pronouns “demonstrably definite” (Déchaine & Wiltschko 2002:410); their ability to function as determiners is related to this semantic property. An example of a DP pronoun is *we* in English; when *we* functions as a determiner, in examples such as *we linguists*, we have the following structure (Déchaine & Wiltschko 2002:21):



φPs, as opposed to DPs, “lack inherent semantics”; they “simply spell out φ-features” and cannot be determiners (Déchaine & Wiltschko 2002:410–411).

Now, in Old Norwegian, first- and second-person pronouns exhibit DP behaviour; they function as determiners in examples like (27):

(27) a. *Hann hævir þat spurt. At ver dæliŕ æigum oss ny guð.*
 he has that heard that we dalesmen get ourselves new god
 ‘He has heard that we dalesmen have a new god.’ (The legendary saga of St. Óláfr, 219475)

b. *En nu með þui at þit felagar kalleð guð ykcan sva margar*
 and now with that COMP you.two fellows call god your so many

iartæignir gera þa late hann vera solskin i morgon
 wonders do then let.SBJV he be sunshine in morning
 ‘And now, since you fellows say that your god can do so many wonders, he should let there be sunshine tomorrow.’ (The legendary saga of St. Óláfr, 219586)

3rd person pronouns, on the other hand, do not appear in contexts like those cited in (27). When a third-person pronoun co-occurs with a noun, the noun is always DEFINITE, and I follow Faarlund (2004:89–90) in interpreting it as an apposition rather than a pronoun. Cf. (28):

(28) *Uin kvað hann riddarinn. Giarna vil ec fylgia þer*
 friend said he knight.the gladly will I follow you
 ‘“Friend”, said he, the knight, “I will gladly follow you.”’ (Strengleikar, 223403)

As Old Norwegian third-person pronouns generally cannot function as determiners, I take it that they are φPs rather than DPs.³⁴ In Old Norwegian, the distribution of null subjects thus seems to correlate with the DP vs. φP distinction: null subjects are almost always third person, and third-person pronouns, as opposed to first- and second-person pronouns, are φPs. This suggests a syntactic derivation that allows

ϕPs, but not DPs, to be null. The generalisation can be formally accounted for if we assume that null subjects are derived by a version of Roberts' (2010) mechanism of pronoun deletion, whereby pronouns are deleted if their features are a proper subset of the features of a Probe with which they agree. I assume that the D-feature, which is only present in first- and second-person pronouns, interferes with the required subset – superset relation and thus prevents deletion; I refer to Kinn (a, b) for details and further discussion.

Keep in mind that both the featural make-up of pronouns and that of the functional categories with which pronouns agree are language-specific. The fact that other languages allow first- and second-person null subjects does therefore not in itself undermine my account of Old Norwegian. In languages that allow first- and second-person null subjects, the internal structure of pronouns may be different, or the relevant functional categories, or both.

5.3 Spreading of the D-feature and the loss of null subjects

We now turn to the question of diachronic change. If it is correct, as I am assuming, that there is a D-feature on first- and second-person pronouns in Old Norwegian that prevents deletion, the loss of null subjects can be analysed in terms of an extension of the D-feature to new contexts. In other words, if it can be shown that the D-feature “spread” to the third person, we potentially have a formal account of how null subjects were lost. There is in fact some evidence of such a development.

In Modern Norwegian, first- and second-person pronouns may function as determiners just like in Old Norwegian. Additionally, however, there are contexts in which third-person pronouns too exhibit DP behaviour, contrary to what was argued for Old Norwegian in Section 5.2. For example, *han* ‘he’ and *hun* ‘she’ can be used as psychologically distal determiners (PDDs) (Johannessen 2006, 2008a, 2008b). PDDs express a certain type of deixis, namely psychological distance to persons. Typically, they occur in contexts where either the speaker or the addressee does not personally know the person referred to, or when the speaker wants to signal a negative attitude to this person. Cf. the examples in (29), from Johannessen (2008b: 164–166):

- (29) a. *jeg og Magne vi sykla jo og han Mikkel da*
 I and Magne we cycled yes and he Mikkel then
 ‘Magne and I, and that guy Mikkel, we cycled then.’ (NoTa, M, 36)
- b. *hun dama blei jo helt nerd da*
 she woman.the became yes completely nerd then
 ‘That woman, she became a complete nerd, you know.’ (NoTa, M, 18)

PDDs cannot co-occur with the definite determiner *den* ‘that’, and they are therefore best analysed as DPs (Johannessen 2008b).³⁵ PDDs are not known to occur in Old

Norwegian; I take them to be symptomatic of a reanalysis of the pronoun system, whereby not only first- and second-person pronouns but also third-person pronouns are DPs.³⁶

The spreading of the D-feature to a new class of pronouns can be seen as an analogical change. In the framework of modern parametric theory, this type of change is predicted by the third factor principle INPUT GENERALISATION (IG) (Roberts 2012, Biberauer et al. 2014). IG states that once a child has identified a formal feature, like the D-feature, in the PLD, he or she will have an inclination to (over-)generalise this feature to new, but similar contexts.³⁷

The D-feature, as we have seen, is a formal feature that enables a pronoun to have determiner properties. A reanalysis from φ P pronoun to DP pronoun by analogy, along the lines suggested above, need not necessarily mean that the new determiner functions arose immediately; a pronoun may be a DP without taking a noun as a lexical complement. Relatedly, nothing in principle prevents the reanalysis from φ P to DP to affect NonRefSs, or a subset of NonRefSs, before RefSs. Thus, the diachronic scenario that I have sketched is compatible with the Middle Norwegian data, in which overt NonRefSs and null RefSs co-occur. It is also worth noting, however, that the Middle Norwegian situation did not last for very long; Norwegian did, eventually, end up as a non-NSL, consistently with common cross-linguistic patterns and the typological predictions of Rizzi (1982).³⁸ Although modern parametric theory allows for the Middle Norwegian situation to occur, it also provides a motivation for the subsequent diachronic development: in a situation where the D-feature preventing deletion is present on first- and second-person pronouns, as well as on SOME third-person pronouns, a further generalisation of the D-feature to ALL third-person pronouns seems close at hand. At that stage, null subjects are lost altogether.

Returning now briefly to the prerequisite hypothesis, the following point can be noted: we have seen that the loss of null RefSs was not a prerequisite for the emergence of overt NonRefSs. The diachronic analysis that I have sketched allows us to take another step away from the prerequisite hypothesis as it was presented in the introduction of this paper: rather than being a consequence of the loss of null RefSs, the emergence of overt NonRefSs in Middle Norwegian may have been one of the language-internal factors that CONTRIBUTED TO this change.³⁹

6. CONCLUSION

In this paper, I have discussed the relationship between null RefSs and null NonRefSs in Middle Norwegian. My point of departure was the idea that I have referred to as the prerequisite hypothesis, which states that the loss of null RefSs was a prerequisite for the rise of overt, NonRefSs. I have argued that Middle Norwegian data do not

corroborate a strong version of the hypothesis but may be reconciled with a weaker version. I have also sketched a diachronic analysis that is compatible with the situation in Middle Norwegian.

ACKNOWLEDGEMENTS

This paper is based on research conducted as a part of my PhD project, cf. Kinn (2016a). I would like to thank three anonymous NJL reviewers for their constructive comments. I would also like to thank Jan Terje Faarlund, Karl Gunnar Johansson, Theresa Biberauer, Elly van Gelderen, Ulrike Demske, David Willis, Tam Blaxter, Ida Larsson and Janne Bondi Johannessen for enlightening discussions.

PRIMARY SOURCES

Old Norwegian examples are taken from the PROIEL treebank, <http://foni.uio.no:3000>. The examples are identified by their sentence ID.

Investigated charters from *Diplomatarium Norvegicum* (volume, number and year):

I 415 1371, III 374 1371, I 420 1372, II 423 1372, V 281 1375, II 442 1375, II 436 1375, V 296 1376, V 297 1376, II 449 1377, I 446 1377, I 445 1377, VII 301 1378, V 313 1379, II 484 1384, I 502 1386, VI 327 1388, IV 571 1389, III 487 1390, IV 599 1391, II 535 1393, V 387 1399, V 423 1402, IV 737 1404, IX 200 1404, III 588 1408, I 615 1408, II 614 1410, III 604 1411, III 610 1412, III 605 1412, V 518 1416, V 531 1419, X 132 1419, I 685 1422, V 570 1424, II 680 1424, II 681 1424, I 692 1424, XI 142 1424, II 683 1425, V 603 1431, XI 151 1431, VIII 286 1431, I 738 1432, I 740 1432, V 609 1432, II 710 1432, II 709 1432, VI 447 1433, II 722 1436, VIII 298 1436, II 727 1437, I 777 1441, II 752 1443, VI 504 1447, VI 506 1447, V 754 1448, VIII 334 1448, XI 192 1450, II 792 1451, IV 932 1454, I 841 1457, II 817 1457, X 217 1457, II 820 1457, V 821 1459, XXI 503 1459, XI 211 1460, IX 358 1460, IV 950 1461, I 859 1462, II 846 1462, IX 341 1462, I 862 1463, VII 466 1466, II 863 1466, I 885 1468, I 886 1468, IV 974 1472, XI 235 1474, V 900 1477, VIII 405 1478, VII 488 1481, XI 249 1482, II 923 1483, IV 998 1484, VIII 414 1486, II 933 1486, I 953 1488, II 946 1488, III 970 1489, VI 610 1490, VIII 427 1490, VI 611 1491, V 959 1492, VI 618 1493, II 983 1495, IV 1029 1498, VIII 447 1499, X 286 1499, I 1002 1500, II 1016 1501, II 1021 1504, I 1018 1506, II 1035 1510, IV 1066 1514, II 1054 1516, XI 300 1516, X 314 1517, V 1024 1518, II 1062 1519, V 1030 1520, II 1071 1522, XVIII 237 1522, II 1079 1525, XI 451 1526, IX 596 1527, II 1087 1528, XXI 772 1530, XI 563 1530, X 633 1531, VIII 645 1531, VI 723 1534, VII 730 1538, XXI 853 1541, IX 322 1454, XI 708 1562,

VI 728 1536, XI 605 1534, XI 650 1538, VII 739 1540, II 1024 1505, IV 1073 1517, XI 298 1515, XXI 929 1548.

NOTES

1. By NonRefSs, I mean subjects that are neither anaphoric nor deictic in the sense of Lyons (1977), and that are also not generic/impersonal in the sense of Sigurðsson & Egerland (2009). Throughout the paper I mark null subjects as *pro*. I will have little to say about topic drop/discourse ellipsis, i.e. omission of subjects from the clause-initial position of main clauses in Modern Norwegian and other Germanic languages; see Nygård (2013) for a recent study.
2. Recent research on null subjects in other (early) Germanic languages includes Axel (2007) on Old High German, Farasyn & Breitbarth (forthcoming) on Middle Low German Breivik (1990), Haugland (2007), van Gelderen (2000, 2013), Rusten (2010, 2013) and Walkden (2013) on Old English and Rusten & Walkden (forthcoming) on Middle English. Walkden (2014) discusses Old Saxon in addition to Scandinavian, Old English and Old High German. Rosenkvist (2009, 2010) and Axel & Weiß (2011) discuss null subjects in modern Germanic dialects. While Axel & Weiß (2011) take the view that there is diachronic continuity between null subjects in early Germanic and the current, non-standard varieties, Rosenkvist (2009, 2010) argues that null subjects in modern Germanic are an innovation.
3. A reviewer correctly points out that there was never one single null subject parameter; Rizzi (1982) refers to two different parametric options to account for the relationship between null RefSs and NonRefSs. However, in accordance with common terminology, I will continue to speak of the null subject parameter in the singular.
4. Cf. also Weiß (1998) and Axel & Weiß (2011) for relevant data from Bavarian.
5. Nicolis (2008) does not discuss Old High German but would be able to account for this language too.
6. There are weighty reasons to assume that subject-verb agreement did NOT condition null subjects in Old/Middle Norwegian and other early Scandinavian languages, including Old Icelandic; see Sigurðsson (1993, 2011), Håkansson (2008, 2013), Kinn (2010, 2011) and Walkden (2014). I will return to this issue in Section 5.
7. Icelandic fits well into Rizzi's predictions also in terms of diachrony. Old Icelandic allowed referential null subjects but lost this property in the transition into Modern Icelandic; in Rizzi's terms, this change can, at least on the face of it, be analysed as a change of the parameter value in (5b).
8. Håkansson, implicitly adopting the traditional V2 analysis of den Besten (1983), assumes that the finite verb moves to C in Swedish main clauses. He does not assume a split CP. Spec-TP is thus the position following the finite verb in main clauses; in (most) subordinate clauses, it follows the complementiser.
9. They could, however, and still can, be deleted from the preverbal position, Spec-CP, which maintained its status as an A'-position.
10. Håkansson (2008) relates this development to the loss of OV word order in Swedish, via the SUBJECT-IN-SITU GENERALISATION (SSG), formulated by Alexiadou & Anagnostopoulou (2001). The SSG states, informally, that only ONE DP argument may remain within VP. Håkansson (2008) analyses OV word order as a result of movement of the object out of VP, following Kayne (1994); objects in VO structures are VP-internal. The implication

of this, combined with the SSG, is that when Swedish turned into a VO language, and the object no longer moved out of VP, the subject had to do so or else the SSG would be violated.

11. Wratil (2011) and Fuß & Wratil (2013) present ideas that in some respects resemble Faarlund's.
12. See note 16 for some discussion of direct speech, which may potentially motivate a switch between grammars.
13. It is common to distinguish between two types of NonRefSs, namely quasi-arguments and "pure" expletives; see e.g. Chomsky 1981:323ff, Rizzi 1986, Bennis 1986 and Vikner 1995:224. I return to this distinction in Section 3.3.2. Generally, however, I will treat the two types of NonRefSs on a par, for the following reason: although quasi-arguments are in some respects in an intermediate position between expletives and referential arguments, this does not affect the prerequisite hypothesis in the strong version (see Section 2). None of the works discussed in Section 2 predicts that overt quasi-arguments will arise while null RefSs are still licit. It is also worth noting that Nicolis (2008:282), who discusses variation between overt and null NonRefSs within individual languages, does not find any systematic, cross-linguistic correlation between quasi-arguments and overt realisation. Thus, a priori, it should not be taken for granted that quasi-arguments and expletives differ, although, as we will see, this has been observed in the history of other Germanic languages.
14. I have not found many clear instances apart from the ones cited here. Keep in mind, though, that the combination of a null RefS and a syntactic environment that licenses a NonRefS within individual charters is rather infrequent.
15. The main clause is verb-initial, as is fairly common in Middle Norwegian, both in sentences with null and overt subjects. Although I have chosen to insert *pro* in the post-verbal position, it is also possible that it is preverbal; there is no way of deciding this on independent grounds. A reviewer raises the point that if the null subject is preverbal, it might be an instance of the discourse ellipsis that we find in Modern Germanic non-null-subject languages (also known as topic drop), i.e. a phenomenon distinct from null subjects in the most common sense of the word. I acknowledge that it is difficult to exclude this possibility completely. However, in terms of theoretical economy, it is not favourable to assume two distinct licensing mechanisms for subject omission when we can account for all the data invoking only one. Analysing preverbal null subjects as something special would be justified if there was independent, empirical motivation for this; e.g. if subject omission in preverbal contexts was associated with special syntactic conditions or pragmatic effects. I am not aware of any properties that clearly distinguish null subjects in main clauses like (9a) from other null subjects (see Kinn et al. 2016 for a similar conclusion based on early Icelandic data). Therefore, I choose to include verb-initial main clauses with null subjects on a par with other clauses with null subjects.
16. A potential objection to this example could be that the sentence containing the overt NonRefS is the direct speech of one of the parties, while the sentence containing the null RefS is not. It could thus be argued that two different grammars are at work. I do not consider this problem grave enough to leave the example without value, however. Hødnebø (1971:149) points out that the language of quotes is not necessarily oral-like or otherwise different from that found in other parts of the charters: "Quite often, wild peasants from Telemark step up and speak like learned men..." (my translation).
17. It can be noted that this charter in addition to the overt NonRefS in (11) contains a null NonRefSs. See Section 3.3.2 for discussion.

18. In addition to the overt NonRefS in (12b), this charter contains a null NonRefS. See [Section 3.3.3](#) for discussion.
19. A reviewer, implicitly assuming that conditional subordinate clauses originate from paratactic structures (cf. [Hilpert 2010](#)), raises the question of whether “the reanalysis of hypothetical V1-clauses as subordinated was fully completed” in Middle Norwegian. The subordination analysis is commonly assumed in the literature (see [Mørck 2013](#) for Middle Norwegian and [Nygaard 1905:380](#) and [Faarlund 2004:252](#) for Old Norwegian/Old Icelandic), and I find it well motivated. A reason for this is that verb-initial conditionals can be found in exactly the same positions as unambiguous conditional clauses with a complementiser. They may precede the statement of the consequence, as in (12a), but they may also follow it, as in example (19) (from [Mørck 2013:680](#)):
- (i) *vil jek vnnæ tek i skaal... vilt thu vel flygiæ tek*
 will I give you one bowl... will you well conduct yourself
 ‘I will give you a bowl if you conduct yourself as you should.’ (DN I 961, 1489)
20. I would like to thank an anonymous reviewer for pointing this out. If the sentence in (12b) is instead considered a cleft, as in [Kinn \(2016a:236\)](#), the question would arise as to whether it is relevant to the history of overt NonRefSs. [Lundeby \(1976:289\)](#) claims that cleft *det* has evolved directly from an anaphoric pronoun. If that is correct, the history of clefts is not directly related to the history of null subjects. However, [Grønvik \(1991\)](#) presents evidence that clefts with null NonRefSs existed in a range of early Germanic languages, including Old Norse (i.e. Old Norwegian and Old Icelandic). I find [Grønvik’s](#) line of reasoning convincing; thus, even if (12b) is analysed as cleft, I take it to be relevant evidence in the context of the prerequisite hypothesis.
21. A tendency for quasi-arguments to be overtly realised before other NonRefSs has also been observed in the history of German ([Axel 2007:295, 303](#), [Fleischer & Schallert 2011:221ff](#)).
22. A similar construction is found in Old Norwegian, but, to the best of my knowledge, never with an overt *þat/thet/det*.
23. It also contains the following sentence, which could be interpreted as containing a null quasi-argument:
- (ii) *bættæ hæffde pro tik wæred hemæ*
 better had [it] you.ACC been home
 ‘You would have been better off at home.’ (DN II 1016, 1501)
24. *thet* in (18a) is a quasi-argument because the predicate, the PP *xxxj aar sidhen ath kôpeth war giorth*, is semantically related to weather predicates; it denotes an “abstract or concrete [process] independent of anybody’s interference or intention, such as the lapse of time ...” ([Faarlund 2004:217](#)).
25. I have not found all of these types of overt NonRefSs within individual documents. A reviewer points out that my reasoning on this point is not completely in accordance with my methodological point of departure, i.e. that we should only compare data produced by one and the same scribe. I acknowledge that this is a potential problem. Unfortunately, it is very difficult to find all of the contexts in which an overt NonRefS can potentially occur within individual documents, so it is hard to refute this objection on empirical grounds. However, I would say that a scenario in which NonRef *det* was a construction marker for existentials for some speakers, but a construction marker for impersonal passives for others, as we would have to assume to maintain a construction marker analysis, does not seem intuitively appealing.
26. In Vietnamese, the NonRef and non-obligatory element *nó* encodes specificity, according to [Greco et al. \(2015\)](#). *Ele* in non-standard European Portuguese has the effect of emphasizing

- a particular pragmatic value (or illocutionary force) of a sentence (Carrilho 2008). NonRef *det* in Middle Norwegian does not seem to share the properties of *nó* or *ele*.
27. Recall from Section 2.1 that even the strong version of the prerequisite hypothesis allows overt NonRef elements if these elements have some additional function to that of being a subject. In examples (22)–(23) the overt and null variants occur in very similar contexts, and I cannot see any clear functional motivation to distinguish the overt pronouns from the null ones. In example (23) the overt variant occurs in an existential construction, whereas the null one is found in an impersonal passive, but, as argued in 3.3.3, evidence from other documents speaks against analysing it as a construction marker for existentials.
 28. Haspelmath (2002:249–250) observes that INFREQUENT words do not always block the formation of a synonym by productive morphological rules. However, infrequent words may, at least in some cases, be stylistically marked, so what we see here is not necessarily free variation.
 29. Axel (2007:303) makes a similar point in the context of Old High German.
 30. A reviewer points out that the question of free variation is also relevant to the distribution of null and overt REFSS in Old and Middle Norwegian. I take it that null RefSS were only used under certain pragmatic conditions; cf. Kinn (2016a:137–142, 177–178) for discussion.
 31. I do remain open to the possibility, however, that future research on Middle Norwegian may reveal patterns of variation that warrant a different conclusion.
 32. It has been argued that the term parameter is no longer appropriate, given the rather fundamental differences between parameters in the original sense and the more recent sense (e.g. Boeckx 2010). I leave that issue aside here.
 33. Middle Norwegian differs from Old Norwegian in that a considerable amount of first-person null subjects, and to some extent second-person ones, are actually found (I have not included any such examples in the present paper). Kinn (2016a) presents evidence that first- and second-person subject omission in Middle Norwegian should be analysed as an early version of topic drop/discourse ellipsis, i.e. a phenomenon distinct from the Old Norwegian type of null subjects. I assume here, to avoid unnecessary stipulations, that this analysis does not extend to the 3rd person in Middle Norwegian, although more research into this issue would be welcome (see Kinn 2016a:272ff for some discussion). Provided that this is on the right track, the possibility of first- and second-person subject omission in Middle Norwegian is not in any conflict with the account of the loss of the Old Norwegian type of null subject that will be presented in what follows.
 34. The analysis of the 3rd sg. n. and pl. pronouns is somewhat more complicated than the analysis of the 3rd sg. m. pronoun *hann* and 3rd sg. f. *hon*. There are no distinct 3rd sg. n. or 3. pl. pronoun forms in Old Norwegian; instead, the 3rd sg. n. and 3. pl. forms of the demonstrative determiner *sá* ‘that’ are used. When used as demonstratives, these forms (sg. n. *þat*, pl. m. *þeir*, pl. f. *þær* and pl. n. *þau*) must have more structure than a φ P. However, I assume that there are DISTINCT, BUT HOMOPHONOUS pronoun forms of these lexical items that are φ Ps and not DPs; cf. Kinn (2016a:166) for discussion.
 35. The observant reader may have noted that the nouns following *han* ‘he’ and *hun* ‘she’ in (29) are definite; the noun in (29a) is a proper name, while the noun in (29b) has a definiteness suffix. In my discussion of Old Norwegian, I used definiteness as an argument against a determiner reading of *hann* ‘he’. At the Modern Norwegian stage, however, definiteness does not undermine the status of *han/hun* ‘he/she’ as determiners: Modern Norwegian, as opposed to Old Norwegian, employs double definiteness as the default

- strategy (Faarlund et al. 1997:296ff, Julien 2005:26ff, Dyvik 1979), which means that the complement of a determiner will in most cases be definite.
36. I have not found any instances of PDDs in Middle Norwegian, and the oldest written instances noted by Johannessen (2008a) are from the beginning of the 20th century. Johannessen (2008a) has also compared two Modern Norwegian speech corpora, TAUS from 1970 and NoTa from 2005. Her investigations indicate that the use of PDDs has increased, and, moreover, that the PDD was predominantly used by young speakers in 1970. This may suggest that the PDD is not much older than the most recent written instances.
 37. Note that although IG implies an inclination to over-generalise, analogies are not predetermined to happen. Strong counter-evidence in the PLD will prevent IG to apply; moreover, modern parametric theory postulates an additional third factor principle, Feature Economy (FE), which (informally) states that children do not assume more formal features than necessary (Roberts 2012, Biberauer et al. 2014). FE may also prevent the effects of IG.
 38. As a reviewer points out, the diachronic development in German was somewhat different; in (High) German, overt quasi-arguments and null NonRefSs co-existed for a long time (see Axel 2007:303).
 39. This, of course, raises the question of why overt NonRefSs started to appear in the first place, and why it happened at the time it did. I must leave these issues for future research.

REFERENCES

- Alexiadou, Artemis & Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32(2), 193–231.
- Aronoff, Mark. 1976. *Word formation in generative grammar*. Cambridge, Mass: The MIT Press.
- Axel, K. & H. Weiß. 2011. *Pro-drop in the history of German*. From Old High German to the modern dialects. In M. Wratil & P. Gallmann (eds.), *Null pronouns*, Berlin/Boston: De Gruyter Mouton.
- Axel, Katrin. 2007. *Studies on Old High German syntax: left sentence periphery, verb placement and verb-second*. Amsterdam/Philadelphia: John Benjamins.
- Baker, Mark. 2008. The macroparameter in a microparametric world. In Theresa Biberauer (ed.), *The limits of syntactic variation*, 351–373. Amsterdam/Philadelphia: John Benjamins.
- Barðdal, Jóhanna & Thórhallur Eythórsson. 2003. The change that never happened: the story of oblique subjects. *Journal of Linguistics* 39(3), 439–472.
- Bennis, Hans. 1986. *Gaps and dummies*. Dordrecht: Foris.
- den Besten, Hans. 1983. On the interaction of root transformations and lexical deletive rules. In Werner Abraham (ed.), *On the formal syntax of the West-Germania*, 47–131. Amsterdam/Philadelphia: John Benjamins.
- Biberauer, Theresa. 2008. Introduction. In Theresa Biberauer (ed.), *The limits of syntactic variation*, 1–74. Amsterdam/Philadelphia: John Benjamins.
- Biberauer, Theresa, Anders Holmberg, Ian Roberts & Michelle Sheehan. 2014. Complexity in comparative syntax: the view from modern parametric theory. In Frederick J. Newmeyer & Laurel B. Preston (eds.), *Measuring grammatical complexity*, 103–127. Oxford: Oxford University Press.

- Biberauer, Theresa & Mark Richards. 2006. True optionality: when grammar doesn't mind. In Cedric Boeckx (ed.), *Minimalist essays*, 35–67. Amsterdam/Philadelphia: John Benjamins.
- Boeckx, Cedric. 2010. What principles and parameters got wrong. <http://ling.auf.net/lingbuzz/001118> (accessed 27 November 2013).
- Breivik, Leiv Egil. 1990. *Existential There. A synchronic and diachronic study*, 2nd edn. Oslo: Novus Press.
- Camacho, José. 2013. *Null subjects*. Cambridge: Cambridge University Press.
- Cardinaletti, Anna & Michal Starke. 1996. Deficient pronouns: a view from Germanic. A study in the unified description of Germanic and Romance. In Höskuldur Thráinsson, Samuel David Epstein & Steve Peter (eds.), *Studies in comparative Germanic syntax*, vol. II, 21–65. Dordrecht: Kluwer Academic Publishers.
- Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: a case study on the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe*, 145–234. Berlin/New York: Mouton de Gruyter.
- Carrilho, Ernestina. 2008. Beyond doubling: overt expletives in European Portuguese dialects. In Sjeff Barbiers, Olaf Koenenman, Marika Lekakou & Margreet van der Ham (eds.), *Microvariation in syntactic doubling*, 301–323. Bingley: Emerald.
- Chomsky, N. 1986. *Knowledge of language: Its nature, origin, and use*. Westport: Praeger Publishers.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: a life in language*, 1–53. Cambridge, Mass: MIT Press.
- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36(1), 1–22.
- Déchaine, Rose-Marie & Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33(3), 409–442.
- Dyvik, Helge. 1979. Omkring fremveksten av artiklene i norsk. Språklig markering av referensielle forutsetninger. *Maal og Minne* 1(2), 40–78.
- Eythórsson, Thórhallur & J. Barðdal. 2005. Oblique subjects: a common Germanic inheritance. *Language* 84(4), 824–881.
- Faarlund, Jan Terje. 1990. *Syntactic change. Toward a theory of historical syntax*. Berlin/New York: Mouton de Gruyter.
- Faarlund, Jan Terje. 2001. The notion of oblique subject and its status in the history of Icelandic. In J. T. Faarlund (ed.), *Grammatical relations in change*, 99–135. Amsterdam/Philadelphia: John Benjamins.
- Faarlund, Jan Terje. 2004. *The syntax of Old Norse: with a survey of the inflectional morphology and a complete bibliography*. Oxford: Oxford University Press.
- Faarlund, Jan Terje. 2012. Fråvæer av noko eller nærvæer av ingenting. Om nullsubjekt og andre manglar. In U. Røyneland & H.-O. Enger (eds.), *Fra holtijar til holting. Språkhistoriske og språksosiologiske artikler til Arne Torp på 70-årsdagen*, Oslo: Novus forlag.
- Faarlund, Jan Terje. 2013. The *pro* cycle. In Elly van Gelderen, Jóhanna Barðdal & Michela Cennamo (eds.), *Argument structure in flux. The Naples-Capri papers*, 257–284. Amsterdam/Philadelphia: John Benjamins.
- Faarlund, Jan Terje, Svein Lie & Kjell Ivar Vannebo. 1997. *Norsk referansegrammatikk*. Oslo: Universitetsforlaget.
- Falk, Cecilia. 1992. Pro-drop in early modern Swedish. *Folia Linguistica Historica* 13, 115–123.
- Falk, Cecilia. 1993a. *Non-referential subjects in the history of Swedish*. Lund University.

- Falk, Cecilia. 1993b. Non-referential subjects and agreement in the history of Swedish. *Lingua* 89, 143–180.
- Farasyn, Melissa & Anne Breitbarth. Forthcoming. Nullsubjekte im Mittelniederdeutschen. *Beiträge zur Geschichte der deutschen Sprache und Literatur*.
- Fleischer, Jürg & Oliver Schallert. 2011. *Historische Syntax des Deutschen. Eine Einführung*. Tübingen: Narr.
- Fox, Danny. 2000. *Economy and semantic interpretation*. Cambridge, Mass: MIT Press.
- Frascarelli, Mara. 2007. Subjects, topics and the interpretation of referential pro. *Natural Language & Linguistic Theory* 25(4), 691–743.
- Fuß, Eric & Melani Wratil. 2013. Der Nullsubjektzyklus. In Jürg Fleischer & Horst Simon (eds.), *Sprachwandelvergleich – Comparing Diachronies*, 163–196. Berlin: De Gruyter.
- van Gelderen, Elly. 2000. *A history of English reflexive pronouns. Person, self, and interpretability*. Amsterdam/Philadelphia: John Benjamins.
- van Gelderen, Elly. 2013. Null subjects in Old English. *Linguistic Inquiry* 44, 271–285.
- Gilligan, Gary Martin. 1987. *A cross-linguistic approach to the pro-drop parameter*: University of Southern California dissertation.
- Greco, Ciro, Trang Phan & Liliane Haegeman. 2015. Optional expletives in radical null subject languages and the syntax of specificity. Talk at CamCos4, Cambridge, May 8.
- Grønvik, Ottar. 1991. “Utbrøytning” i eldre norrøn diktning og i andre gammelgermanske språk. *Arkiv för nordisk filologi* 106, 1–56.
- Grøtvedt, Per Nyquist. 1961. Forholdet mellom skrift og talespråk i sørøstnorsk i senmiddelalderen. *Arkiv för nordisk filologi* 76, 213–230.
- Håkansson, D. 2008. *Syntaktisk variation och förändring. En studie av subjektlösa satser i fornsvenska*: Lunds universitet dissertation.
- Håkansson, David. 2013. Null referential subjects in the history of Swedish. *Journal of Historical Linguistics* 3(2), 155–191.
- Haspelmath, Martin. 2002. *Understanding morphology*. London: Hodder Education.
- Haugan, Jens. 1998. Passiv av norrøne dobbelt objekt-konstruksjonar og subjektspørsmålet. *Norsk lingvistisk tidsskrift* 16, 157–184.
- Haugland, Kari E. 2007. *Old English impersonal constructions and the use and non-use of non-referential pronouns*: University of Bergen dissertation.
- Heltøft, Lars. 2012. Zero expression of arguments in Old Danish. *Acta Linguistica Hafniensia* 44(2), 169–191.
- Hilpert, Martin. 2010. What can synchronic gradience tell us about reanalysis? Verb-first conditionals in written German and Swedish. In Elizabeth Closs Traugott & Graeme Rousdale (eds.), *Gradience, gradualness and grammaticalization*, 181–202. Amsterdam/Philadelphia: John Benjamins.
- Hinzelin, Marc-Olivier & Georg A. Kaiser. 2007. El pronombre *ello* en el léxico del español dominicano. In Wiltrud Mihatsch & Monica Sokol (eds.), *Language contact and language change in the Caribbean and beyond*, 171–188. Frankfurt am Main: Lang.
- Hødnebo, Finn. 1971. Om diplomer som kilde for norsk språkhistorie. In *Mål og namn. Studiar i nordisk mål- og namnegransking*, Oslo: Universitetsforlaget.
- Höhn, Georg. 2015. Demonstratives and personal pronouns. *Cambridge Occasional Papers in Linguistics* 8, 84–105.
- Hyams, Nina. 1987. The theory of parameters and syntactic development. In Thomas Roeper & Edwin Williams (eds.), *Parameter setting*, 1–22. Dordrecht: D. Reidel.

- Johannessen, Janne Bondi. 2006. Just any pronoun anywhere? Pronouns and “new” demonstratives in Norwegian. In Torgrim Solstad, Atle Grønn & Dag Haug (eds.), *A festschrift for Kjell Johan Sæbø – in partial fulfilment of the requirements for the celebration of his 50th birthday*, 91–106. Oslo: Novus Press.
- Johannessen, Janne Bondi. 2008a. Psykologiske demonstrativer. In Janne Bondi Johannessen & Kristin Hagen (eds.), *Språk i Oslo. Ny forskning omkring talespråk*, 63–77. Oslo: Novus forlag.
- Johannessen, Janne Bondi. 2008b. The pronominal psychological demonstrative in Scandinavian: its syntax, semantics and pragmatics. *Nordic Journal of Linguistics* 31(2), 161–192.
- Julien, Marit. 2005. *Nominal phrases from a Scandinavian perspective*. Amsterdam/Philadelphia: John Benjamins.
- Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, Mass: MIT Press.
- Kinn, Kari. 2010. *Formelle subjekter i norsk – en diakron undersøkelse*. Universitetet i Oslo MA thesis.
- Kinn, Kari. 2011. Overt non-referential subjects and subject-verb agreement in Middle Norwegian. *Working papers in Scandinavian syntax* 88, 21–50.
- Kinn, Kari. 2014. The cognitive status null subject referents in Old Norse and their Modern Norwegian counterparts. In Kristin Bech & Kristine Gunn Eide (eds.), *Information structure and syntactic change in Germanic and Romance languages*, 173–200. Amsterdam/Philadelphia: John Benjamins.
- Kinn, Kari. 2016a. Null subjects in the history of Norwegian. Ph.D. thesis, University of Oslo, Norway.
- Kinn, Kari. 2016b. Null arguments in Old Norwegian: interaction between pronouns and the functional categories of the clause. Manuscript, University of Oslo.
- Kinn, Kari, Kristian A. Rusten & George Walkden. 2016. Null subjects in early Icelandic. *Journal of Germanic Linguistics* 28(1), 31–78.
- Kroch, Antony. 1989. Reflexes of grammar in patterns of language change. *Language Variation and Change* 1, 199–244.
- Kroch, Antony. 1994. Morphosyntactic variation. In *Papers from the 30th regional meeting of the Chicago Linguistics Society. Parasession on variation and linguistic theory*, 180–201. Chicago: Chicago Linguistic Society.
- Lander, Eric T. & Liliane Haegeman. 2014. Old Norse as an NP language. *Transactions of the Philological Society* 112(3), 279–318.
- Lebeaux, David. 1987. Comments on Hyams. In Thomas Roeper & Edwin Williams (eds.), *Parameter setting*, 23–39. Dordrecht: D. Reidel.
- Lundeby, Einar. 1976. Om “utbrytningen”s opphav og innhold. In Lars Svensson, Anne Marie Wieselgren & Åke Hansson (eds.), *Festskrift tillägnad Gösta Holm*, 280–301. Lund: Lund studentlitteratur.
- Lyons, John. 1977. *Semantics*, vol. 2. Cambridge: Cambridge University Press.
- Mørck, Endre. 1990. Ellipsis of the subject of main clauses in Middle Norwegian. In *Tromsø linguistics in the eighties*, 356–368. Oslo: Novus Press.
- Mørck, Endre. 2011. *Leddstillinga i mellomnorske heilsetninger. Funksjons- og feltanalyse og materialpresentasjon*. Oslo: Novus forlag.
- Mørck, Endre. 2013. Mellomnorsk språk. In Odd Einar Haugen (ed.), *Handbok i norrøn filologi*, 640–689. Bergen: Fagbokforlaget 2nd edn.
- Mørck, Endre. 1994. The distribution of subject properties and the acquisition of subjecthood in the West Scandinavian languages. In Toril Swan, Endre Mørck &

- Olaf Jansen Westvik (eds.), *Language change and language structure. Older Germanic languages in a comparative perspective*, 159–194. Walter de Gruyter.
- Nicolis, Marco. 2008. The null subject parameter and correlating properties. In Theresa Biberauer (ed.), *The limits of syntactic variation*, 271–294. Amsterdam/Philadelphia: John Benjamins.
- Nygård, Mari. 2013. *Discourse ellipsis in spontaneously spoken Norwegian*: Norwegian University of Science and Technology dissertation.
- Nygaard, Magnus 1894. Udeladelse af subjekt; “subjektløse” sætninger i det norrøne sprog (den klassiske sagastil). *Arkiv för nordisk filologi* 10, ny följd 6(1), 1–25.
- Nygaard, Magnus 1905. *Norrøn syntax*. Kristiania: Aschehoug.
- Pintzuck, Susan. 2002. Verb-object order in Old English: variation as grammatical competition. In *Syntactic effects of morphological change*, 276–299. Oxford: Oxford University Press.
- Reinhart, Tanya. 1995. Interface strategies. *OTS Working Papers in Linguistics*.
- Rizzi, Luigi. 1982. *Issues in Italian syntax*. Dordrecht: Foris Publications.
- Rizzi, Luigi. 1986. Null objects in Italian and the theory of *pro*. *Linguistic Inquiry* 17(3), 501–557.
- Roberts, Ian. 2007. *Diachronic syntax*. Oxford: Oxford University Press.
- Roberts, Ian. 2010. A deletion analysis of null subjects. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.), *Parametric variation. Null subjects in minimalist theory*, 58–87. Cambridge: Cambridge University Press.
- Roberts, Ian. 2012. Macroparameters and minimalism. A programme for comparative research. In Charlotte Galves, Sonia Cyrino, Ruth Lopes, Filomena Sandalo & Juanito Avelar (eds.), *Parameter theory and linguistic change*, 320–335. Oxford: Oxford University Press.
- Roberts, Ian & Anders Holmberg. 2010. Introduction: parameters in minimalist theory. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.), *Parametric variation. Null subjects in minimalist theory*, 1–57. Cambridge: Cambridge University Press.
- Rögnvaldsson, Eiríkur. 1995. Quirky subjects in Old Icelandic. In H.Á. Sigurðsson (ed.), *Papers from the twelfth Scandinavian conference on linguistics*, Reykjavik: University of Iceland.
- Rosenkvist, H. 2009. Referential null subjects in Germanic languages – an overview. *Working papers in Scandinavian syntax* 84, 151–180.
- Rosenkvist, Henrik. 2010. Null referential subjects in Övdalian. *Nordic Journal of Linguistics* 33(3), 231–267.
- Rusten, Kristian A. 2010. *A study of empty referential pronominal subjects in Old English*. University of Bergen MA thesis.
- Rusten, Kristian A. 2013. Empty referential subjects in Old English prose: A quantitative analysis. *English Studies* 94(8), 970–992.
- Rusten, Kristian A. & George Walkden. Forthcoming. Null subjects in Middle English. *English Language and Linguistics*.
- Sigurðsson, H. Á. 1993. Argument-drop in Old Icelandic. *Lingua* 89, 247–280.
- Sigurðsson, H. Á. 2011. Conditions on argument drop. *Linguistic Inquiry* 42(2), 267–304.
- Sigurðsson, H. Á. & V. Egerland. 2009. Impersonal null-subjects in Icelandic and elsewhere. *Studia Linguistica* 63(1), 158–185.
- Spurkland, Terje. 1989. *Innføring i norrønt språk*. Oslo: Universitetsforlaget.
- Thráinsson, Höskuldur. 2007. *The Syntax of Icelandic*. Cambridge University Press.

- Vikner, Sten. 1995. *Verb movement and expletive subjects in the Germanic languages*. Oxford: Oxford University Press.
- Vittersø, Gro. 2004. *Fra sva til sav: stabilitet og endring i norske leddsetninger 1200-1875*. University of Oslo MA thesis.
- Walkden, George. 2013. Null subjects in Old English. *Language Variation and Change* 25, 155–178.
- Walkden, George. 2014. *Syntactic reconstruction and Proto-Germanic*. Oxford: Oxford University Press.
- Weiß, Helmut. 1998. *Syntax des Bairischen. Studien zur Grammatik einer natürlichen Sprache*. Tübingen: Niemeyer.
- Wetås, Åse. 2008. *Kasusbortfallet i mellomnorsk. Ein komparativ studie av proprialt og appellativisk materiale*: University of Oslo dissertation.
- Wratil, M. 2011. Uncovered *pro* – on the development and identification of null subjects. In M. Wratil & P. Gallmann (eds.), *Null pronouns*, Berlin/Boston: De Gruyter Mouton.