

The Loss of Old English Null Expletive ‘it’

How a language can transform from one that allows null expletives
to one that disallows them

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Abbreviations

NOM	Nominative
ACC	Accusative
DAT	Dative
GEN	Genitive
OE	Old English
ME	Middle English
EME	Early Middle English
MnE	Modern English
IP	Inflectional Phrase
CP	Complementizer Phrase
DP	Determiner Phrase
VP	Verb Phrase
AdjP	Adjective Phrase
PP	Prepositional Phrase
Spec, XP	Specifier of an X-phrase
X°	Syntactic head
PRO	Phonetically null subject of a non-finite verb
pro	Phonetically null subject of a finite verb
EPP	Extended Projection Principle
PLD	Primary Linguistic Data
CRE	Constant Rate Effect
GB	Government and Binding Theory
NSL	Null Subject Language
DR	Definiteness Restriction
†	Unattested
*	Ungrammatical

Abstract

Old English (OE) had the option of null thematic and expletive subjects, but this possibility decreased significantly before becoming impossible in Modern English (MnE). This thesis explores the loss of the null expletive *it*, or rather the changes that led to the requirement of an overt expletive *hit/it* in constructions which lack an overt thematic subject in Spec, IP of a clause.

Constructions in which MnE would require an overt expletive generally allowed a null expletive in OE, for instance a quasi-argument with weather verbs (1) or true expletives in “impersonal constructions” (2) and extraposed expletives.

- (1) Nap nihtscua, norþan sniwde (The Seafarer in Visser 1970:4)
grow.dark night-shadows, from.the.north snowed (OEME 2004)
“Night-shadow darkened; snow fell from the north” (Glenn 1982)
- (2) *Us* gelustfullað gyt furður to sprecenne be ðan halgan were Iohanne
us.DAT delights yet further to speak of the holy man John
“It delights us to speak yet further of the holy man John” (Fischer et al. 2000:45)

By OE, null quasi-argument *hit/it* ‘it’ was already declining in use. In the impersonal construction, only remnants of the null true expletive existed by 1500 (Fischer et al. 2000). To explain the unproductivity of null subjects in MnE, various authors (Hogg 1992; Kjellmer 2004; Visser 1970; and others) cite a large loss of inflectional morphology between OE and MnE. Lightfoot (1999), Fischer et al. (2000), and others argue a change in the word order parameter ultimately led to many changes in case morphology. Williams (2000) hypothesizes that the increase in the use of the overt expletive *there* in ME existential constructions was a result of the change in distribution of pronominal subjects, which has implications for overt true expletive *hit/it*.

It has been argued that child language acquisition is crucial to the transmission of language across generations and that evidence from language acquisition can be used to understand important aspects of syntactic change (Lightfoot 1991 and others). Kirby and Becker's (2007) synchronic study of the path of language acquisition of overt expletive *it* as opposed to referential and quasi-argument *it* in MnE speaking children's speech shows acquisition in decreasing referentiality. Similarly to the paths of MnE acquisition, I argue the null pronoun *it* in OE became more restricted in a decreasing order of reference until being disallowed, illustrated in the proposed model in Table 1.

Table 1: The stages of the loss of the null subject *hit/it* between Pre-OE and MnE

Stage	Null thematic <i>hit/it</i>	Null quasi-argument <i>hit/it</i>	Null true expletive <i>it</i>
1 (†Pre-OE) ¹	† <i>Possible in general</i>	† <i>Possible in general</i>	† <i>Possible in general</i>
2	† <i>In restricted paradigms</i>	† <i>Possible in general</i>	† <i>Possible in general</i>
3 OE	In restricted paradigms	In restricted paradigms	† <i>Possible in general</i>
4	In restricted paradigms	In restricted paradigms	In restricted paradigms
5	Disallowed	In restricted paradigms	In restricted paradigms
6 ME (MnE)	Disallowed	Disallowed	In restricted paradigms
7 (MnE)	Disallowed	Disallowed	Disallowed

From the descriptions and analyses of OE that I considered in this study, along with an analysis of the EPP checking method in OE (Alexiadou & Anagnostopoulou 1998; Holmberg 2005; Jaeggli & Safir 1989), I will argue its status is at stage 3, where true null expletive *it* is possible across paradigms while both null thematic and quasi-argument *hit/it* are restricted in use. If the progression of OE follows this model, it could be evidence for using other aspects of child language acquisition to inform theories of syntactic change.

¹ † is used to denote unattested stages

1 Introduction

Old English (OE) has evidence of null subjects that are not allowed in Modern English (MnE). This statement leads to two questions that concern its importance to syntactic change and the cross-linguistic analysis of null subjects. First, how and to what extent did OE have null subjects? Secondly, how does a language transform from one that allows null subjects to one that does not? For now, I define the term “subject” in the following manner (1):

- (1) **Subject**
The syntactic constituent that occupies the specifier of the inflectional phrase (Spec, IP) position, either by
 - (i) moving to Spec, IP from an argument position or
 - (ii) merging (lexical insertion) in the Spec, IP node.

In distinguishing the subjects which appear in Spec, IP by move (i) or merge (ii), I employ two distinct types of subjects: thematic subjects (2) and true expletive subjects (3).

- (2) **Thematic subject**
A referential subject that is assigned a theta role. That is, it is assigned one of various theta roles (e.g. agent, experiencer) as the argument of a predicate, generally a verb.
- (3) **True expletive subject**
Theta-less arguments that cannot be realized in the positions of theta role assignment reserved for arguments (Haegeman 1994:62).

When used with weather predicates, such as “**It** is cold outside” or “**It** is snowing,” the pronoun *it* is also not referential, but should not be treated as a true expletive either. I will adopt Chomsky’s (1981) definition of “quasi-argument” subject (4) for this subject type.

- (4) **Quasi-argument subject**
A weather verb subject that is assigned a theta role as normal arguments are and can bind PRO, but does not have reference.

Chomsky’s argument is that weather *it* can bind PRO. I will discuss these definitions and the reasoning that they must be distinguished in section 2.2.

Different syntactic heads (for instance inflection or verb) check the case of one or more DPs in the specifier position (subjects, objects, and others depending upon the grammar), which can be realized overtly as a result. OE did not require a subject with nominative case that frequently must appear in MnE constructions with finite verbs, such as “**He** went to the store” or “**She** was happy to be here.” One type of construction which requires an overt true expletive in MnE but not in OE is the impersonal construction (5).

(5) **OE Impersonal Construction**

The clauses with a class of verbs whose subject can be nominative or dative in OE, while in MnE would require as a subject either true expletive *it* or a thematic subject (in the case of psych verbs).

The impersonal construction in MnE requires a true expletive, as in “**It** seemed that John was leaving the party early,” or a thematic subject, as in “**John** seems to be leaving early.” Although MnE requires nominative subjects, the impersonal construction in OE frequently had dative DP subjects with the theta role of experiencer instead of what would be the nominative DP subject in MnE (6).

- (6) **Us** gelustfullað gyt furður to sprecenne be ðan halgan were Iohanne
 us.DAT delights yet further to speak of the holy man John
 ‘It delights us to speak yet further of the holy man John’ (Fischer et al. 2000:45)

In this case, as in other impersonal constructions, I suggest that the dative noun would be considered the subject in the OE phrase because of its movement to the Spec, IP position. On the other hand, the true expletive *it* would be the subject in the MnE translation because of its insertion into Spec, IP. The presence of each of these two subjects can be linked to the Extended Projection Principle (7).

(7) **Extended Projection Principle (EPP)**

At surface structure, all projections of IP must have a subject (Haegeman 1994:255).

In MnE, this requirement means one of two possibilities. First, a subject with nominative case can appear in Spec, IP to check the EPP. Second, another DP can be moved to Spec, IP to check the EPP. Regarding the first possibility, a true expletive can be merged into the Spec, IP position. I explore this requirement further in section 2.4. For instance, the structure “**It** is nice of John to go to the store for us” also contains the true expletive *it*, which must be overt in MnE, with the verb conjugated in the third person singular.

Although OE allows null subjects, its properties are not identical to those of various modern null subject languages (NSLs). For instance, Jaeggli and Safir’s (J&S 1989) general proposal regarding different types of NSLs does not apply entirely to OE because OE does not conform to either type of NSL, which have either uniformly derived or uniformly underived verbal paradigms (section 3.1). Alexiadou and Anagnostopoulou’s (A&A 1998) proposal, which describes EPP checking either by Move/Merge XP/X° or verb raising. The syntactic properties of OE most closely match their description of Move/Merge XP, but also match many of the properties of Move/Merge X°; however, I found that Move/Merge XP can better account for the data of OE (section 4.2). Unlike in the NSLs described in these proposals, in OE, both thematic and quasi-argument subjects are allowed to be null while true expletives are not. This distinction in the status of null subjects could be a result of the mechanisms that check EPP differing between these languages and OE. Most importantly, this distribution of null and overt subjects might introduce a syntactic distinction in OE between quasi-arguments and true expletives that is not obvious in MnE.

This thesis explores the second question posed above: how can a language transform from one that allows null subjects to one that does not allow null subjects? In order to explore this issue, I will evaluate in Chapter 4 various proposals for modern null subject languages

(Alexiadou & Anagnostopoulou 1998; Holmberg 2005; Jaeggli & Safir 1989). I will also discuss Williams' (2000) proposal for OE "expletive" *there* in Chapter 5 by evaluating the properties of *hit/it* in OE, primarily as described by Visser (1970) and Fischer et al (2000).

In addition, in modeling the path of the change in OE, I will consider possible connections with the progression of language acquisition. Many linguists (Lightfoot 1991, 1999, 2003; Pinztuk 2003, Yang 2000, and others) have set out to explore this link by posing the following question: Does child acquisition have an impact on syntactic change? Lightfoot 2003, Pinztuk 2003, Kroch 1989, and others have argued that child language acquisition is crucial to explaining syntactic changes that occur across generations; if this theory holds, evidence from language acquisition can be used to understand important aspects of syntactic change. In this respect, it is relevant to consider that, despite the fact that MnE does not allow null subjects, children acquiring it use null subjects at early stages of syntactic development. These null subjects appear distinct from the null subjects used by children learning NSLs, such as Italian and Japanese.

Kirby and Becker (2007) found in their synchronic study of the child acquisition of overt true expletive *it* (as opposed to referential and quasi-argument *it*) in MnE-speaking children's speech that the loss of null subjects follows a hierarchy of referentiality. This finding could contribute to a model of the decrease in null subjects from OE on. Most importantly, similar to the paths of MnE acquisition, the null pronoun corresponding to *it* would have become more restricted in a decreasing order of reference (thematic subjects, quasi-argument subjects, then true expletive subjects) until it became completely disallowed. Comparing the results of this study to syntactic descriptions of OE by Visser (1970) and Fischer et al. (2000), I propose a model for the loss of null subjects according to referential status. Each of the null subject types

becomes restricted in turn, starting with thematic *hit/it*, then quasi-argument *hit/it*, followed by true expletive *it*, as illustrated in Table 1 below.

Table 1: The stages of the loss of the null subject *hit/it* between Pre-OE and MnE

Stage	Null thematic <i>hit/it</i>	Null quasi-argument <i>hit/it</i>	Null true expletive <i>it</i>
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2	†In restricted paradigms	†Possible in general	†Possible in general
3 OE	In restricted paradigms	In restricted paradigms	†Possible in general
4	In restricted paradigms	In restricted paradigms	In restricted paradigms
5	Disallowed	In restricted paradigms	In restricted paradigms
6 ME (MnE)	Disallowed	Disallowed	In restricted paradigms
7 (MnE)	Disallowed	Disallowed	Disallowed

From the descriptions and analyses of OE I considered in this study, I will argue that its status is at stage 3, where null true expletive *hit/it* is possible across paradigms while both null thematic and null quasi-argument *hit/it* are possible, but more restricted in use. The types of null subjects are more restricted in the following order: null thematic *hit/it*, then null quasi-argument *hit/it*, followed by null true expletive *it*. Then, after all null subjects are restricted, they become disallowed in the same order. If the progression from OE to later stages follows this model, it can be evidence to support the use of other aspects of child language acquisition to inform theories of syntactic changes.

I concluded in the course of my research that the EPP checking method is Move/Merge XP for both OE and MnE. This finding opens the door for other explanations of the loss of null OE subjects. I argue that the evidence from both OE null subjects and the null subjects in acquisition of MnE are in fact consistent with the stages in my proposed model. If this is correct, my findings can be possible evidence for a relationship between syntactic change and acquisition.

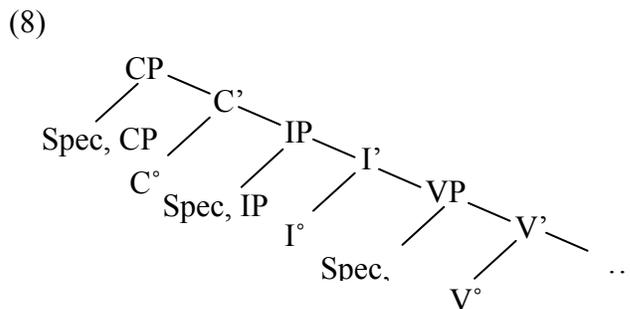
² † is used to denote unattested stages

I discuss two approaches to syntactic change in Chapter 3 that take into consideration two sets of empirical data: synchronic child acquisition and statistical measurements of diachronic data. In Chapter 4, I introduce hypotheses regarding the status of null subjects cross-linguistically and in relation to Old English. In Chapter 5, I review a partial picture of the syntactic structure of OE null and overt subjects with a focus on *hit/it* ‘it.’ In addition, I consider Williams’ (2000) hypothesis regarding OE null expletive *there* for both null true expletive *it* and null quasi-argument *hit/it*. In Chapter 6, I argue for the adoption of Move/Merge XP as the EPP checking method in OE as well as one of the factors that contributed to the model I propose for OE null subject loss. I consider Kirby and Becker’s (2007) study of child acquisition of pronoun *it* in MnE in Chapter 7 to give further evidence for the proposed model.

2 An Exploration of Syntactic Terms and Concepts

2.1 *The General Syntactic Structure*

I acknowledge that there is a great variety of syntactic configurations that linguists use in the field of Syntax. These models can encompass the many cross-linguistic properties that a simplified structure cannot. However, for the sake of simplicity and accessibility of this thesis, I will use a single syntactic prototype in all examples. I base this structure on X-bar theory. I will be using the same general syntactic structure (illustrated in (8)) for all examples.



Although this structure does not take into account all intricacies of language without further elaboration, it will be sufficient to highlight the properties of subjects in OE and MnE, which is the focus of this thesis.

2.2 *The Three Types of it*

In this thesis, I refer to three types of subjects: thematic, quasi-argument, and true expletive. Although many times syntactic distinctions are only made between thematic and “expletive” subjects, evidence from OE calls for a third type of subject. A quasi-argument *it* is the subject used with weather verbs. I argue that, quasi-argument *it* shares properties with thematic subjects, although it lacks reference, like true expletive subjects. I adopt Chomsky’s

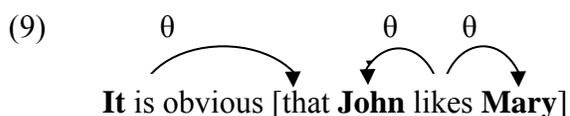
(1981) argument that quasi-arguments are assigned an independent thematic role, given that it can bind other arguments (see below). The syntactic distinction between quasi-arguments and true expletives is integral to this thesis. Several of the works I reference (A&A 1998, Fischer et al. 2000, J&S 1989, Holmberg 2005, and Williams 2000) do not formally separate these two types of subjects. In addition to lacking reference, they must both be overt in MnE and represented by the pronoun *it*, but that is the extent of their similarities. In OE, there is evidence that quasi-argument *hit/it* is “rarely” null while the true expletive *it* is almost always null (Visser 1970). In fact, null true expletive *it* is not rare like the quasi-argument until ME (Fischer et al. 2000). Therefore, I will explore the properties of each in turn.

The first type of subject is the “thematic subject,” which I defined in (2) (repeated below from section 1):

(2) **Thematic subject**

A referential subject that is assigned a theta role. That is, it is assigned one of various theta roles (e.g. agent, experiencer) as the argument of a predicate, generally a verb.

It is an argument that is assigned a theta role by the verb and moves to Spec, IP, the subject position. Theta (θ) roles are the roles the verb assigns to the “arguments” (nouns, pronouns, etc.), as illustrated in example (9).



Some of these include **agent** (the “actor” of an action), the **theme** (the topic of discussion or thought, *Mary* in example (9)), and **experiencer** (what is undergoing some experience, such as *like* or *die*, such as *John* in example (9)). The predicate *is obvious* also assigns a theta role to the clause “that John likes Mary,” but this fact is outside the scope of this paper. These subjects

have reference, meaning they refer to entities that either real or imagined in the world (for example *dragon*, *John*, or *she*).

I define the term true expletive subject in (3) (repeated from section 1):

(3) **True expletive subject**

Theta-less argument that cannot be realized in the position of theta role assignment reserved for arguments (Haegeman 1994:62).

Unlike thematic subjects, the true expletive *it* (which is many times referred to simply as “expletive *it*”) cannot be assigned a theta role by the verb. This property is illustrated in example (9) above; *it* is not assigned a theta role by the predicates *likes* or *is obvious*. Its lack of theta role can be shown by the inability of a thematic subject that must be assigned a theta role to replace *it*. For example, it is ungrammatical to replace *it* with *Steve* in example (9) above: “***Steve** is obvious that John likes Mary.” Also, unlike thematic subjects, true expletive *it* does not have reference. Again, using example (9), one cannot make reference to a concept/entity that *is obvious* other than the clause *that John likes Mary*, which is also an argument (in addition to having an embedded predicate *likes*). However, it is possible for the clause to assume the subject role (by being inserted into Spec, IP) of *is obvious* in addition to being assigned a theta role by *is obvious* before moving to the theta-less position at the beginning of the sentence (10).

(10) [That John likes Mary] is obvious.

The pronoun *it* in (9) appears as an expletive subject: the clause “that John likes Mary,” serves as a subject in (10) by being moved (or inserted) higher in the clause (in Spec, IP). However, if this clause cannot (or is not) lexically inserted in this position, then the true expletive *it* is inserted preverbally instead, yielding (9).

The quasi-argument *it* does not have reference, which means it does not refer. However, since it cannot replace a whole clause, as true expletive *it* can, I will distinguish quasi-argument

and true expletive *it*. I will adopt a modified version of Chomsky's (1981) definition of "quasi-argument" subject (reproduced from definition (4) in section 1) for this subject type.

(4) **Quasi-argument subject:**

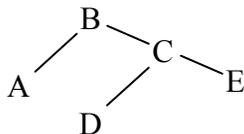
A weather verb subject that is assigned a theta role (as normal arguments are) and can bind PRO, but does not have reference.

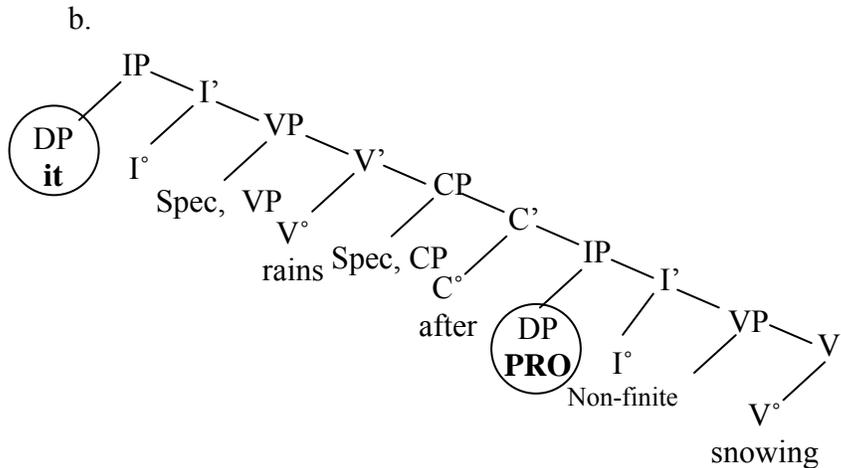
Chomsky's argument is that weather *it* can bind PRO (the phonologically null subject of an infinite verb). In other words, *it* c-commands and is co-referent with PRO (11).

(11) It (sometimes) rains after [α snowing] (Chomsky 1981:324)

According to Chomsky, α in (11) must be PRO because it is not governed, which is to say it is not the case that another element c-commands α without a maximal projection (XP) as an intervening barrier. For instance, in example (12a), if B is the maximal projection, then A could m-command D or E, D could m-command A or E, and E could m-command A or D. Therefore, by inserting example (11) into a syntax tree, PRO cannot be bound by an element within its own maximal projection (VP), but can be c-commanded by *it* (12b). Given this property, quasi-argument *it* is taken to be assigned a theta role, as thematic subjects are. In addition, the Spec, IP position that it occupies cannot be theta-less because a clause cannot move there (as it can occur in the counterpart of the extraposition cases with true expletives). For example "It rains so much that I need a raincoat" cannot become "*[That I need a raincoat] rains so much."

(12) a.





2.3 An Explanation of Null Subjects **PRO** and **pro**

If an element is “null” in linguistics, it can mean one of two scenarios: either the element is not part of the structural representation at all (i.e. it is not present at all) or it syntactically represented although it is phonologically null (i.e. still present underlyingly). This distinction will be important in this thesis because of the distinction between subjects that have theta roles (thematic and quasi-argument subjects) and subjects that do not (true expletive subjects). If a null subject has no theta-role, I will argue it is not present at all (i.e. it is not represented by any independent lexical item in the grammar). On the other hand, if a subject is thematic and only phonologically null, it must be represented in the grammar.

In the literature, there are generally two types of phonologically null subjects with theta roles: **PRO** and *pro* (or big **PRO** and little *pro*). While **PRO** and *pro* are both representations of phonologically null subjects, **PRO** is the subject of an infinite verb (13a) and *pro* is the subject of a finite verb (13b).

- (13) a. John wants **PRO** to be president
 b. **pro** siempre habla de si mismo (Spanish)
 (he) always talks about himself (J&S 1989:10)

Although both types of subjects have theta roles, they do not necessarily appear in all languages. For instance, the second type of phonologically null subject (*pro*) is present in NSLs (like Spanish), but not others (like English). I will also argue that null counterparts of thematic and quasi-argument *hit/it* that appear in OE are represented by *pro*. On the other hand, I will argue that the last type of null subject (the true expletive) cannot be represented by either PRO or *pro* because it does not have a theta role (by definition (3)).

2.4 The Projection Principle and its Extension

I will now discuss two concepts that are integral in the syntactic treatment of subjects and movement: the Projection Principle and the Extended Projection Principle (EPP). First of all, an element can be either a phrase (XP) or a phrasal head (X°). For example, a nominal argument (*John, the dog, a dragon*) is a Determiner Phrase (DP). A Verb Phrase (VP) is made up of more than just the verb (it includes everything that the VP dominates), so the verb in a sentence is actually the “head” of the VP, or V° . The head of a phrase actually “projects” the phrase, so the type of phrase is determined by the category of the head (for instance, an Inflectional head (I°) projects an Inflectional Phrase (IP)). This analysis is a product of the Projection Principle, which I define in (14).

- (14) **Projection Principle**
Lexical information is syntactically represented (Haegeman 1994:55)

According to this principle, the lexical information of the heads is represented by the “projection” of the category of head (determiner, inflection, verb, etc) onto the larger phrase. This definition also implies that the structure of the element must be maintained throughout all transformations. Therefore, if a phrase moves to another position, it must remain a phrase and

cannot enter a head position. Since a Spec, XP position is not a head, phrasal elements can move there. In the same vein, if a head moves to a higher position, the position must be a head position for it to remain a head. The combination of the Projection Principle and the necessity for subjects in English spawned an extension of the Projection Principle, namely the Extended Projection Principle (EPP) (repeated from section 1 in (7) below)

(7) **Extended Projection Principle (EPP)**

At surface structure, all projections of IP must have a subject (Haegeman 1994:255).

This principle was intended initially to explain the need for overt true expletives in English and other non-NSLs but incorporated the necessity for an element to appear in Spec, IP or I°. Many linguists have argued that the EPP is weak or non-existent in NSLs and strong in non-NSLs, but I will adopt the view argued by A&A (1998) that all languages must check the EPP (see section 2.4 below). In MnE, the EPP is checked by either the movement of an XP to Spec, IP or the merge (insertion) of an element (also XP) into Spec, IP. As I argue below (section 6.1), OE also checks EPP by movement to Spec, IP (i.e. it does not satisfy the EPP by merging another head into I, as I will analyze in section 6).

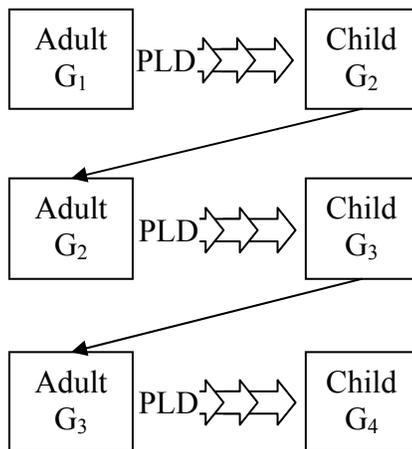
3 Two Approaches to Syntactic Language Change

3.1 Parameters Approach to Change (Lightfoot 2003)

Lightfoot (2003) argues that much can be discovered by combining what we as linguists know about language change, language variation, and acquisition. Not only does he establish that it is possible to explain certain syntactic changes through what we know about the acquisition process, but he also maintains that it is possible to determine the nature of parameter-setting by taking into consideration various simultaneous “catastrophic” changes within a grammar.

Further, Lightfoot presents the idea of chain reactions within a grammar. According to this model, during acquisition, the child sets a certain parameter and parses all incoming information in accordance with that parameter. Once individuals of one generation innovate and acquire a grammar with a new parameter setting on the basis of properties acquired on the basis of their primary linguistic data (PLD), they will produce more sentences than were in their initial PLD that fit this setting. What the child produces (which will ultimately become the PLD of the next generation) will provide more evidence for this parameter setting and ensure that more individuals of the next generation acquire it (15). However, how could the existence of these slightly different grammars allow mutual intelligibility between the younger generation (with the new parameter setting) and the older generation (with the former setting)? First, Lightfoot argues that by generating more data to fit with this new setting, the child acquiring the language is “speeding up” the process of language change. However, the new generation would still be producing sentences which would be partially consistent with the former setting, considering

(15)



also that their input is shaped by the previous setting. These “exceptions” to the new parameter setting would then reduce in number from one generation to the next. One can see this phenomenon in English where the regular ablaut paradigms (vowel alterations) in strong verb categories in OE are now the “irregular” verbs in MnE, for example, *fly-flew-flown*. Speakers are also continually trying to regularize the verb system, as seen in the case of *dream* (*dream-dreamt-dreamed*), where a former strong verb now has an optional weak verb declension *dreamed* (Curzan 2005).

Two facts that are difficult to reconcile are the gradualness of language change and the “catastrophic” changes to parameters. Lightfoot contends that a change in parameter setting could be considered “catastrophic” because of the binary nature of parameters, even if that instantaneous change is not reflected in the written record. In addition, Lightfoot references the sharp increases or decreases of structural changes, such as V-to-I in studies on the increase of auxiliary *do* in 18th century English by Ellegård (1953) and Tiekens-Boon van Ostade (1987). Although there may be catastrophic parameter changes that occur underlyingly, it could be hard to tell that they happen based on surface data alone, because of how gradual syntactic change has been shown to occur or spread across a population of new learners. This idea becomes clear in

the context of written data from distinct time periods. The texts in older versions of English are very spread out temporally; therefore, the catastrophic changes we can identify in hindsight on the basis of formal analysis of the underlying grammar did not necessarily seem catastrophic to readers at the time. First, Lightfoot argues that it takes a robust amount of data for an acquirer to set a parameter that is different than the one which yielded the PLD. In addition, the acquirer could acquire more specific exceptions to their parameter setting, which can also be compatible with the grammar of the previous generation. Languages commonly have many optional transformations based upon distinctions in the syntactic categories involved. For instance, MnE shows residual inflectional raising to the complementizer in questions (like “Will Frank leave?”) but not in declarative clauses (like “Frank will leave”). With careful examination one can see that “optional rules” are used more systematically than at first glance.

In addition to new parameters (possibly involving transformational rules) to allow the production of sentences to match their input, acquirers could also need to postulate new categories of words in their grammar, or reanalyze the categories which are already present. Returning to the OE verb example, the strong verbs were initially divided into seven categories. As a result of the different syntactic changes, they were in a sense “uncategorized” and “recategorized” as one large class of irregular verbs. However, many MnE verbs seem to maintain residues of the strong verb classes with verbs they once shared a category with. For instance, the MnE verb *creep* was a class 3 strong verb in OE, *creopan*, which was conjugated *créopan~créap~crupon~cropen* in OE. The MnE past tense is conjugated as *crept* (Hogg 1992:133-4). Another example is MnE modals, which were once main verbs, but formed a new category with special attested transformational rules and conditions of its own. This recategorization process has happened in both directions within single languages (both the

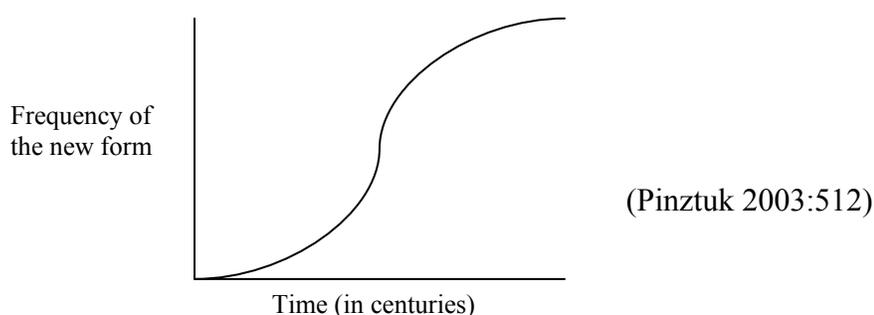
formation of new categories and the combination of old categories). These changes also follow Lightfoot's chain reactions or linguistic "domino effect." He uses the term domino effect to explain obsolescence as a by-product of some other trigger. The recategorization of OE verbs into modal and main verb categories can also be viewed as the by-product of the loss of V-to-I movement.

Lightfoot also argues that parameters are set on the basis of "unambiguous cases" in the PLD that children are exposed to. There is a wide occurrence of ambiguity in the data and how the surface structures can be analyzed differently, given new parameter settings between generations; therefore, it is not unequivocally true that children would be sensitive only to truly unambiguous cases. This reasoning would still support the idea that the number of unambiguous cases for the new setting could increase a large amount without the parameter changing. However, the fact that there are unambiguous cases of the new setting might serve as evidence that the parameter setting has already changed, as Pinztuk (2003) and other variationists argue (section 2.2). However, since possible evidence for each parameter setting is in the PLD, it is hard if not impossible to tell whether speakers have internalized one setting with "exceptions" or more than one setting. In order for change to occur, children must not be making use of every sentence independently, particularly unambiguous forms of the previous parameter setting, and must be doing so on a systematic basis, as well as actively categorizing words in new ways. This argument would account for the categorization not only in situations of change, but also in general syntactic rules.

This generative approach to change makes use of many independently confirmed hypotheses about child language acquisition, including parameter setting, and imperfect transmission, and "catastrophic" changes in the data. However, other studies, such as Ellegård's

(1953) analysis of the rise of periphrastic *do* in English, show an ‘S’-shaped curve, represented in (16).

(16) S-shaped curve of linguistic change



At the beginning of the period of change, replacement of old forms is slow, then speeds up in the middle, finally slowing down near the completion of replacement. Therefore, given certain aspects of the empirical evidence, it may be necessary to reformulate this proposed approach to syntactic change, as Pintzuk proposes in section 2.2 below.

3.2 Variationist Approaches to Change (Pintzuk 2003)

Pintzuk (2003) explains different aspects of syntactic change based upon the theory of grammatical competition, which has been proposed by many linguistic variationists, including Pintzuk herself. She points out three generalizations about assumptions made in the variationist field. First, syntactic “options” are either an alteration within a single grammar or two distinct options in separate grammars that do not permit optionality but which are internalized by a single individual as distinct grammars. Pintzuk sides with the second option, arguing that individuals who initiate change are diglossic (i.e. internalize more than one distinct grammar). The lack of optionality is consistent with the theory of Principles and Parameters, where a parameter must be set unambiguously. Therefore these cases would belong to contradictory parameter settings.

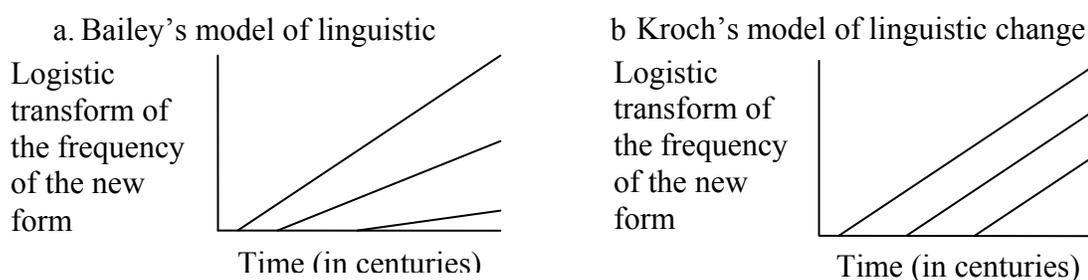
Second, syntactic change is gradual, a common assumption in the study of language change. Third, when multiple grammars are in competition, the frequency of options may differ across contexts, but the rate of change is constant for each context. This last assumption is based upon Kroch's Constant Rate Effect (CRE), explained below.

Pintzuk employs Santorini's (1992) argument that competition is empirically a part of generative syntax. She does so because of the dichotomy of settings as well as the distinction of I-language (the internalized grammar) and E-language (the external spoken language), which is "at the heart of the generative paradigm." Kroch (1995) also applies competition to acquisition by arguing that there would be no learnability problems for a child acquiring a single grammar with the same setting as the PLD. Positive and unequivocal evidence of competition between two grammars with different parameter settings would force the child to choose. In the absence of evidence of competition, the child would simply analyze the data as reflecting a single parameter without any problems. Kroch's analysis relies upon the idea of parameters being set early in the period of first language acquisition. Instead of a parameter changing over the course of acquisition, the acquisition of an entire new grammar is undertaken by the child to set the parameter a second time, to a distinct parameter setting. Undertaking this view implies that every child who does not initially set the parameter to the setting consistent with the grammar of the PLD is diglossic. This view also relies upon the assumption that the child sets parameters very early in the acquisition process. If there is clear evidence that some children do initially mis-set parameter settings, the view of diglossia with competing parameter settings does in fact have weight.

Pintzuk (2003) also covered some different arguments for explaining the frequency and rate of various syntactic changes. According to Bailey (1973), actuation of a change happens

sequentially, where change is more rapid in a “more favoring” context, as demonstrated in example (17a) (reproduced from Pintzuk 2003:513). A more favoring context is one that has more properties than another context in favor of one of the competing parameter setting. To explain the progression of a gradual change, Kroch (1989) proposes the CRE. According to Kroch, the frequency of use across environments differs, but they all increase at the same rate, as demonstrated in example (17b) (reproduced from Pintzuk 2003:514).

(17)



Of the two, CRE is empirically the most convincing proposal. Kroch (2989) demonstrates its validity in concrete cases of language change, such as the rise of *do*-support in English and the replacement of *have* by *have got* in British English. For instance, in Kroch tracks the rise of *do*-support through various contexts, including both negative (18a) and affirmative declaratives, (18b), positive questions (18c), and more.

- (18) a. ...bycause the nobylyte ther commynly **dothe not** exercise them in the studys therof (Ellegård 1953:318)
 b. They worschipped the sonne whanne he **dede** arise (Ellegård 1953:78)
 c. Where **doth** the grene knight holde hym? (Ellegård 1953:304)

The average slope of the frequency of use of parameters in these linguistic contexts varies around 3.70 with a range of 0.56 (p. 222), which is clear evidence for the rates remaining constant across contexts. Kroch also explains the seemingly differing rates of change in certain cases by showing that the change in some environments was the combined result of different

changes. For instance, the negative “ne-*infinitive*-pas” construction changed to the “ne-pas-*infinitive*” form in different contexts in French because of both the movement of *pas* and the loss of V-to-I in French. In all, the CRE theory seems to be an adequate fit for the data investigated in detail by Kroch. Kroch (1989) explains that the rate of change across contexts is constant because grammatical competition is at the level of the subsystems involved (the dialects) and not the contexts in which they appear. However, more research into the observed effect might point to greater explanation for why the percentage of replacement of one form by another follows an ‘S’-shaped curve.

3.3 Towards a Unification of the Approaches to Syntactic Change

In their models for syntactic change, Pintzuk and Lightfoot begin with two very different sets of facts. The variationist approach starts with an empirically unexplained numeric trend in syntactic change (the ‘S’-shaped curve, see (16) in section 3.1) and builds its argument around that trend. The model of grammar competition resulting from diglossia in individual speakers would be consistent with these results. The parameters approach, on the other hand, begins with aspects of child language acquisition (the need for children to perceive cues from PLD and common mistakes children make, among others) to explain imperfect transmission between generations. In this view, it is the frequency of certain cues in an individual’s input that leads to the shift in individual parameter settings. Just as in regular phonetic changes, there are certain directions that change tends to follow. However, there are no laws of change, either syntactic or phonetic, between the settings but a gradual shift between one and the other.

Lightfoot and Pintzuk’s common goal is to find an empirically relevant theory to explain the properties of language change. Aspects of these theories are based upon modern languages

and their speakers (for instance by making use of child language acquisition), while the data is from written sources of languages that are no longer spoken. Therefore, one all-encompassing theory might not be able to link the different sources of empirical evidence directly. There needs to be more research into child acquisition. For instance, researcher could investigate whether diglossia is the right approach to employ in explaining the changes in parameter settings in individual children's grammars and regarding the point at which children set their parameters in the acquisition process. Both Lightfoot and Pintzuk allude to some frequency of the replacement form at which there is a parametric change from the former setting to the setting that allows the new form, which is the key to reconciling these two points of view. If there is a theory that could improve upon both of these proposals, it would have to be empirically motivated and compatible both with the properties of language acquisition and of language change.

4 The Syntax of Null or Overt Subjects

4.1 Jaeggli & Safir (1989) – Null Subject Parameter

Jaeggli and Safir (J&S 1989) distinguish the two types of null subjects, *pro* and PRO. For a discussion of PRO and *pro*, see section 2.3. J&S use other aspects of agreement (such as identification) to arrive at a theory about *pro*. They do so in a Government Binding (GB) framework, where thematic and non-thematic subjects are distinguished according to the thematic roles they are or are not assigned (see section 1). J&S make a formal assumption about possible languages: if there are null thematic subjects in a language, there will also be null “expletive” subjects, but if there are null “expletives,” it is not necessary for null thematic subjects to be allowed in the language³ (see section 2.2 for a discussion of thematic, quasi-argument, and true expletive subjects)

According to J&S, null thematic subjects are permitted in all and only languages with “morphologically uniform inflectional paradigms” (p. 29). “Morphologically uniform” is defined as a paradigm which has either only underived inflectional forms (meaning a derivation has no morphological distinction from the stem or root) or only derived inflectional forms (which have inflectional affixes attached to the stem or root). In other words, a paradigm is morphologically uniform if the verbs are very richly inflected in all their forms (like Italian or Spanish) or have absolutely no inflection (such as Chinese or Japanese). This distinction is important because the second type (which has no rich inflectional morphology) also shows null thematic and expletive subjects. Languages with partially uniform paradigms are predicted not

³ J&S make no distinction between quasi-arguments and true expletives, grouping them all as “expletives.”

to show null thematic subjects (such as English, which has the lone present tense third person singular marker *-s*). However, J&S's definition of derived and underived forms does not account for the lack of *pro* in all English paradigms, such as the past tense: the regular past tense could be considered uniformly derived because there is an *-ed* suffix attached to the root in all past tense forms. Nevertheless, null subjects are not allowed. We could consider the possibility that the past tense paradigm is not uniformly derived because of the existence of the irregular past tense verbs (which are derived by ablaut changes, making the past tense not uniformly derived). However, I could not explain other tenses with uniform paradigms as easily. For example, the future with the *will* modal could be considered an uninflected paradigm because all of the forms in the paradigm are identical (*I will go, he will go, they will go, etc.*). Therefore, the reasoning J&S give for explaining why some languages are NSLs is not entirely comprehensive.

The Hebrew examples J&S note are intriguing. In the case of Hebrew, some paradigms, such as the present tense, are not inflected for person; rather, they are inflected for gender and number. According to the null subject parameter, null thematic subjects would not be allowed in the Hebrew present tense. This situation is indeed accurate. However, null expletives are allowed in all tenses, including the present tense where thematic *pro* is disallowed. In the present tense, where null thematic subjects are disallowed (19a), it is possible to license null expletive subjects (19b).

- (19) a. ?Ani/ata/hu/*Ø ?oxel ?et ha tapu?ax
 I/ you/he/ Ø eat-sg. ACC the apple
 "I/you/he/*Ø eat(s) the apple."
 b. Nir?a she-Itamar shuv me?axer
 seems that-Itamar again late
 "It seems that Itmar is late again."

Margiz ?oti she-Itmar tamid me?axer
Annoys me.DAT that-Itmar late again
“It annoys me that Itmar is always late.” (J&S 1989:31)

Although Hebrew is not standardly treated as a pro-drop language (overt thematic pronouns are required in the present tense (19a)), the possibility of null expletives in the present tense (19b) would provide evidence of a language with paradigms containing null expletives where null thematic subjects are disallowed. In addition, null thematic subjects are allowed in the Hebrew past and future tenses (where the verb carries ϕ -features), so Hebrew is not a language showing null expletives that is void of null thematic subjects. That is, other paradigms within the same language, such as past tense, do inflect for person (as well as number and gender). In these paradigms, null thematic *pro* is allowed. However, Hebrew does demonstrate J&S’s prediction that a language or paradigms within a language with null expletives do not necessarily have null thematic subjects. This linguistic example leads me to wonder if there is a separate criterion in general for allowing null expletive subjects.

If it is possible to allow null thematic subjects such as *pro* (section 2.3) in some paradigms and not others, would that necessarily be recognizable from older texts? However, a collection of texts might not express the full paradigms for many verbs (especially in light of the variety of classifications the Old and Middle English verbs had). Crucially, if the required characteristic of an NSL is to be consistently a null expletive language, then OE would not qualify. However, other languages which contain *pro*, such as Finnish (Holmberg 2005), allow null and overt true expletives within the same language. Still further, there are other languages that allow *pro* only in restricted paradigms, like Hebrew, and allow null true expletives in all paradigms. I would consider OE (which has null as well as overt true expletives) similar to Finnish in this regard. However, if this assumption is true, then it would follow that a language

which has null thematic and true expletive subjects would restrict null thematic subjects before restricting null true expletive subjects. Therefore, the null true expletive *it* must have been lost in the history of English, at least during the same period as null thematic subjects if not afterwards. In addition, considering the possibility for a language to have null subjects in some paradigms and not others, the restriction of null subjects to certain paradigms and/or the loss of a morphologically uniform paradigm could have played a part in the disappearance of null subjects.⁴

From the viewpoint of acquisition, it is crucial to identify if the option of pro-drop exists in the PLD. The fact that a language can have the possibility of thematic pro-drop in morphologically uniform inflectional morphemes shows that there is systematic pro-drop within a language which depends upon there being rich or bare morphology. However, null quasi-arguments and true expletives remain unexplained. Null non-thematic subjects are allowed under multiple conditions, the most obvious of which is under conditions similar to those of null thematic subjects. However, some languages (or verbal paradigms within languages, such as present tense in Hebrew) allow only true expletives to be null. J&S stated that null true expletives could appear in the absence of null thematic subjects, such as in German (20).

- (20) Er sagte, dass _ ihm scheint, dass Hans den Hund getötet hat
He.NOM said that him.DAT seemed that Hans the.ACC dog killed has
“He said that (it) seemed to him that Hans killed the dog.” (J&S 1989)

The ability for a true expletive to be null might not depend upon a language having a morphologically uniform inflectional paradigm. The information carried in the verbal inflection is its “ ϕ -features,” which are the features (person, number, etc.) that the verb shares with the

⁴ Incidentally, I could see null expletives being possible in other English varieties around the world that have dropped the third person singular ending and would allow null expletives, possibly even null thematic subjects. This could also be possible if the language came into contact with or were spoken by speakers of Chinese, Japanese, or other underived paradigms which have null thematic subjects.

subject. However, it appears as though ϕ -features do not always have to be involved considering, for instance, the lack of ϕ -features in the present tense of the Hebrew null expletive constructions above (19b). However, the Hebrew null expletive in the present tense does not have a verb to even mark with ϕ -features, so it occurs in a uniformly underived paradigm.

Another possibly interesting point brought up by J&S was that there are possible null objects in languages which do not otherwise have null subjects, for instance French (21).

- (21) a. Je le crois ridicule.
 “I believe it ridiculous”
- b. Je _ crois ridicule [que Jean soit innocent].
 “I believe it ridiculous that Jean is innocent” (J&S:35).

J&S explain that the direct object *le* ‘it’ is missing in the surface structure of the second phrase although the meaning of the main clause has not changed between (21a) and (21b). According to J&S, this example shows that even in languages which do not have pro-drop (French is considered a non-pro-drop language), object drop is still possible. However, this example is misleading because the object of the verb in the second sentence is actually the clause *que Jean soit innocent* ‘that Jean is innocent’. Then the object would not be null but rather the equivalent of *le*. The only evidence for there being a null object is the English translation J&S give. Therefore, I am not convinced that this set of data is evidence for there being null objects in French.

J&S used this French example to illustrate their point that identification of *pro* is dependent upon agreement. According to them, agreement can identify an empty category as *pro* if and only if the agreement category or node case-governs the empty node. They use this rule to explain the topic-drop in languages such as Chinese and Japanese, where they argue the null thematic subject or object is identified by a previous sentence or clause (p. 36-7). The West

Flemish example is also used to support their argument. Since the complementizer is inflected for gender and person, it identifies and allows *pro*. In the first example, the complementizer *dase* is inflected for person and gender (22a), while in the second, *da* is not (22b).

- (22) a. "...dase pro komt"
b. * "...da pro komt" (p. 34).

The difference between the two in terms of allowing *pro* shows how important it is for there to be ϕ -features, regardless of whether or not they appear directly in the verb. The topic-drop languages with no rich inflection would also fall under this case of inflection outside of the verb. This distinction is similar to the one between Hebrew thematic subjects (which arguably require ϕ -features in order to be null and therefore cannot appear in the present tense which does not inflect for ϕ -features) and expletive subjects (which can be null in any tense despite the lack or presence of ϕ -features).

4.2 Alexiadou & Anagnostopoulou (1998) – Reformulated EPP

Alexiadou and Anagnostopoulou (A&A 1998) propose that the EPP is "strong" (has to be checked) in every language despite the lack of overt expletives in NSLs.⁵ To account for NSLs, which allow the order VSO as well as lack an overt expletive requirement, A&A propose that EPP is checked by verb movement, not Move/Merge XP (p. 516). VSO orders are not subject to the same definiteness restriction (DR) effects that appear in traditional EPP-checking languages, such as English, so A&A argue against a covert expletive in many NSLs. As Old English (OE) allowed verb-first constructions and verb movement as well as XP-fronting, this apparent contrast between types of EPP checking is especially relevant.

⁵ See section 2.4 for a full discussion of the EPP

A&A demonstrate that languages are not divided into strong and no/weak EPP, but rather that all languages have the strong version of EPP. Instead, A&A divide the languages based upon whether this feature is checked by Move/Merge or by V-raising. Languages with overt expletives are EPP-feature checked by Merge, which is the insertion of an expletive into a preverbal position, or Move, which is the movement of any number of phrases, including DP (determiner phrase), to preverbal position. This linguistic category includes V2 languages, which allow any constituent to appear in Spec, CP. Additionally, English requires a DP in the position of Spec, IP to check EPP. On the other hand, NSLs have rich verbal morphology which A&A argue checks the EPP feature when the verb is raised. According to A&A, this is because the AGR affix on the verb has its own lexical entry, similar to what a pronoun would have, and acts as the moved EPP-checking element. However, this analysis is only correct if it is assumed that verbal agreement and pronouns have a similar function in the grammar of these languages (an assumption much of A&A's proposal depends upon).

A&A mention the case of Fiorentino and Trentino, which are dialects of Italian (an NSL) that freely allow postverbal subjects without definiteness restriction (DR) effects, which characterize non-pro-drop languages (p. 517). Briefly, in non-NSLs, when the subject DP is postverbal, DR effects disallow the DP to be definite. For instance, in example (23), the subject “man” can have an indefinite determiner (like *a*) but not a definite article (like *the* or *every*).

(23) There arrived a man/*the man/*every man (A&A 1999:103)

Unlike non-NSLs (such as English and French), Fiorentino displays a lack of DR effects by allowing a definite post-verbal subject in constructions similar to overt expletive constructions in non-pro-drop languages (24a) as well as preverbal subjects and clitics (24b). These properties would make those dialects NSLs, but unlike other NSLs clitics also appear preverbally, so A&A

- (24) a. gli e venuto la Maria
 is come the Maria
- b. Mario e parla
 Mario speaks (A&A 1998:517)

assert that Fiorentino and Trentino check EPP by Move/Merge X° instead of Move/Merge XP. In addition, these Italian dialects require the overt realization of subjects as clitics.⁶ This distinction is an important one to make because otherwise nothing else would really differentiate these dialects from French, a non-NSL that has DR effects as well as verb-raising (p. 518). The Move/Merge X° parameter setting allows the Italian dialects to be considered pro-drop, as the other VSO languages are. A&A propose the parameter settings of XP vs. X° to differentiate the Italian dialects from the Move/Merge XP non-pro-drop languages. According to A&A, there are two types of subject clitic languages: those like French, where overt clitics are obligatory in the absence of a full-DP subject (25a) and DR effects are present (25b), as well as those like Fiorentino, where clitics are also obligatory (26) and DR effects are non-existent (24a).

- (25) a. *(Il) mange
 he eats
- b. *Il est arrivé Jean
 he/it PAST arrived Jean
- (26) *(tu) parli
 (you) talk

In the example (25a), the clitic (*il* ‘he’ or *tu* ‘you’) is required, as it is in (26); however, in (25b), the postverbal definite subject *Jean* is not allowed because of the disallowed DR effects in French, unlike (24a).

As mentioned above, OE allowed verb-first constructions, verb movement, and XP-fronting. As a language which allows verb movement, it is not clear by which method OE

⁶ The properties of clitics are important for a deeper look into DR effects, but are outside the scope of this thesis.

satisfies EPP. Subjects of both OE and the Italian dialects can appear in preverbal or postverbal position and, if there are no DR effects present in OE, then it would likely have the same parameter setting of move X° . These facts imply that OE could have satisfied EPP in one of three different ways. First, it could check EPP by Move/Merge XP. Alternatively, it could in principle be possible for OE to have the Move/Merge X° parameter setting, meaning the language would have verb raising and subject clitics like the two Italian dialects. Since OE does consistently exhibit verb raising to I° and to C° as well as many preverbal subject pronouns, Move/Merge X° would be a possible EPP checking method, although there is substantial evidence in favor of a different analysis, as I will argue later. It is important to point out that EPP is checked in the Italian dialects by Move/Merge X° and verb raising is a consequence of rich verb morphology. Third, OE could instead satisfy EPP by V-raising alone and allow null subjects like classic NSLs, such as standard Italian or Spanish. Because it can have multiple preverbal phrasal elements, it would follow that OE would have the Move/Merge XP parameter, but since it allows verb raising and there is evidence of verb-initial constructions without subjects (27), OE could also be a candidate for Move/Merge X° .

- (27) a. Siġon þa to slæpe (Beowulf, Visser 1970:4)
 Sink then to sleep
 “Then [they] sank to sleep”
- b. **Neoman us** to wynne weoroda drihten (Crist & Satan, Visser 1970:9)
 Receive us.DAT to joy sweet drips
 “Sweet joy drips, which we receive”

However, I will assume that verb movement can take place for reasons independent of EPP checking. However, if EPP were checked by Move/Merge X° (e.g. through verb movement in OE), it would necessitate a deeper look into the types of triggers that would change this

parameter. Additionally, it is possible that the verb in (27b) moved to C°, leaving the dative DP *us* in Spec, IP.

Williams' (2000) proposal⁷ for null expletives in OE states that the null expletive subject *there* of a finite verb represented by *pro* could only appear after the finite verb, while overt clitics can appear either preverbally (28a) or postverbally (28b).

- (28) a. **þu** eart god **þu** ðe *dest* wundru ana (Psalter, Visser 1970:93)
 You are god you who are wonder moreover
- b. Ant nis **ha** witerliche akeast & in-to þeowdom idrahen
 and not-is she truly cast into slavery drawn
 “and she is not truly cast or drawn into slavery”
 (Hali Meiðhad, Williams 2000:170)

At first glance, this system seems to be most compatible with the Move/Merge X° parameter setting: OE has verb raising and although clitics are not required across the board as in Fiorentino and Trentino (27a), they are always required when pre-verbal. Of course, this conclusion raises other issues. For instance, why there would be the possibility but not requirement for the null clitic (if this is in fact what the null pronouns in OE are)? Also, to be considered to have this setting, OE would also need not to have DR effects.

One could still raise the question as to whether EPP was indeed satisfied in OE by Move/Merge X° because other preverbal elements, for instance adverbs (29a) and non-clitic DPs (29b), cannot have X° status like clitics might.

- (29) a. **Now** es arly, now es late, Now es day, now es nyght
 Now is early, now is late, now is day, now is night
 (a1433 Pr. Consc. 1433; Visser 1970:4)

⁷ For a more in-depth analysis of Williams' proposal, see section 5.3

- b. Swa **ma wite**na beoð on bradnysse middan-eardes...
 as more wisemen.GEN be.pl on surface middle-earth...
 (Ælfric, Saints' Lives 292, 130; Visser 1970:38)

However, clitics⁸ need not always be the Move/Merge X° element: the verb (V°) could alternately check EPP by Move X°. One could argue that if OE alternatively checked EPP by verb raising like in NSLs, less of its properties would be explained than by Move/Merge XP. NSLs check the EPP feature by V-raising, so that they do not require a null expletive *pro*. However, the overwhelming presence of overt subject pronouns could not be explained. In other words, EPP checking by verb raising alone would not explain the presence of overt expletives and preverbal/postverbal pronouns in OE. Also, the change from a NSL to a non-NSL would have to be explained, along with the differences between the history of English and NSLs, which would be relevant to explain how current NSLs did not change at some point to non-NSLs.⁹ If OE were a NSL and were subject to both EPP checking by V-raising and Move/Merge X°, then the possibility of null expletives could be explained, but since these are parameter settings, only one can be chosen. As I will argue, OE in fact most closely matches the characteristics of EPP checking by Move/Merge XP because of the existence of preverbal dative DPs in OE impersonal constructions.

After consideration of the properties of each of these three types of languages along with the evidence of OE in Williams (2000) and Visser (1970), it would seem impossible for OE to satisfy EPP by only one of the three systems proposed by A&A (1998). Although the Move X°

⁸ In this case, I am not proposing that OE pronouns are clitics, but considering them to have X° properties for the purpose of comparing OE with J&S's Move/Merge X° EPP checking proposal.

⁹ A&A do not address issues involving syntactic change and parameter re-setting in their article. I will focus on the latter issue, regarding the change of OE from an NSL language (at least regarding null expletives) to a non-NSL language.

alternative would seem very promising, I will argue it faces substantial difficulties. There are verb raising and possibly overt clitic subjects as in Move/Merge X° languages, although it would require other X° elements, such as V° , to also check EPP through Move/Merge, as shown in (29). Move/Merge XP languages are satisfied by movement of a phrasal element to preverbal position or insertion of a preverbal overt expletive (although there is no direct evidence of this argument as opposed to movement of an argument from post-verbal position), but OE also has evidence of verb-initial constructions (27) and overt post-verbal quasi-argument *hit/it*. The final proposed EPP checking method is by verb raising, but that applies solely to NSLs of the Italian/Spanish type, which do not have overt expletives or other fronted constituents in Spec, IP to satisfy the EPP. A&A did not entertain the possibility of a language satisfying EPP multiple ways, but if these three methods are the only ones and OE does not adhere entirely to any of them alone (although the move XP alternative seems to be the most viable one), then there is either an unexplored alternative, OE can check EPP in more than one way, or it utilizes Move/Merge XP in most cases with a few verb-initial exceptions

4.3 Holmberg (2005) – Finnish true expletive *sitä* and small *pro*

Holmberg (2005) argues that the analysis of *pro*¹⁰ proposed by Alexiadou and Anagnostopoulou (1998) and others (Manzini & Roussou 1999; Manzini & Savoia 2002; Platzack 2003, 2004) does not apply to corresponding cases of null subjects.¹¹ Holmberg argues that in Finnish the interpretable features of Agr on the non-topicalized verb do not necessarily

¹⁰ For a discussion of *pro*, see section 2.3.

¹¹ For the properties of and distinctions between the subject types, refer to the definitions and discussion in section 2.2.

satisfy the EPP.¹² His argument is primarily based on the observation that overt true expletive *sitä* (which he refers to as “expletive” *sitä*) is blocked only when the subject is null or another element is satisfying EPP. In contrast, he proposes that in Finnish, a pro-drop language that has an overt true expletive, there must be *pro* specified for verbs that show ϕ -features. The motivation for this proposal is the possibility for pro-drop in the 1st person (30a) and 2nd person (30b), but not the 3rd person (30c) in Finnish. There is also an overt true expletive *sitä*, which can be merged in a position where other fronted elements can be moved (31a) except in structures where null subjects can occur (31b).

- (30) a. (Minä) olen väsynyt
I be-PRES-1SG tired (533)
- b. (Te) puhutte englantia
you speak-2PL English (539)
- c. *(Hän) puhuu englantia
He/she speak-3SG English
- (31) a. Sitä/Minulle/*Ø sattui (minulle) onnettomuus
EXP/me-ALL/Ø happened me-ALL accident
- b. *Sitä puhun englantia
EXP speak-1SG English

According to Holmberg, EPP is checked in Finnish by Move/Merge XP: the preverbal pronominal subject (30) or the verb is fronted and topicalized (30a,b), or the true expletive *sitä* is merged to Spec, IP (31a). Holmberg argues that if there was no little *pro* in Finnish and Agr checked EPP, there would be no motivation for the blocking of overt true expletives (31b). In OE, overt true expletives are not attested and quasi-argument *hit/it* can only appear in constructions where the verb is in the third person (32a) and when there is no other nominative

¹² For a discussion of the EPP 2.4.

subject (32b). OE true expletive *it* is different from Finnish, as I will summarize below, since Finnish allows overt expletives also with focalized 1st/2nd person subjects while OE true expletive *it* does not exist.

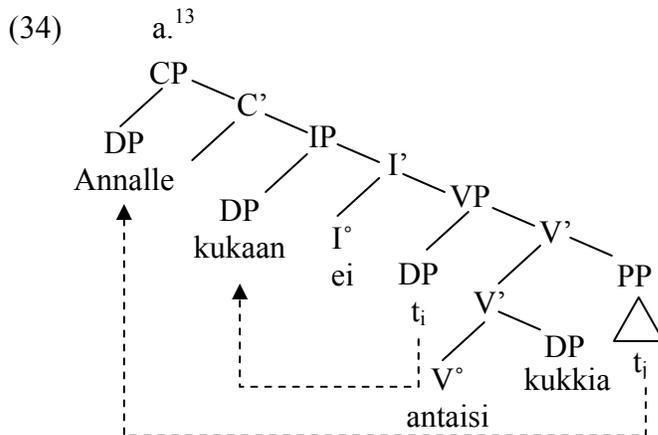
- (32) a. swa on niht þonne *hit* freoseþ (Blikl. Homl., Visser 1970:36)
 as on night then it freezes
- b. þa dydon hi swa *hit* halgum *gedafnode* (Napier, Visser 1970:39)
 then caused they such.that it holy befits
 “Then they made it seem holy”

Holmberg’s (2005) most important argument is that an overt true expletive cannot fill in an empty position immediately preceding a finite verb (Spec, IP) in the 1st and 2nd person, which requires a thematic pronoun if there are interpretable features on the Agr (33a). In addition, if a verb is topicalized and fronted to check EPP, the overt true expletive pronoun also cannot appear (33b).

- (33) a. *Sitä puhun englantia
 EXP speak-1SG English
- b. Oletteko (*sitä) käyneet Pariisissa?
 be-2PL-Q EXP visited Paris-INE
 ‘Have you been to Paris?’ (543)

Despite the requirement in Finnish for there to be a pre-verbal constituent to check EPP (as evidenced in these examples), an overt true expletive cannot satisfy EPP when the subject is dropped because the dropped subject cannot be focalized and the two elements cannot have the contrasting property that is required in Finnish for there to be another DP before the subject. Holmberg describes the possibility of one or two preverbal constituents (or none in the case of focalized verbal constituents), but not three, in addition to the contrastive quality the fronted constituent must have. First, Finnish requires a pre-verbal constituent which is moved or

merged to check EPP in Spec, IP (34a-b). In this example (34a-b), the subject *kukaan* ‘anybody’ is initially inside the VP, but can move to the Spec, IP node.



b. Annalle kukaan ei antaisi kukkia
 Anna-ALL anybody not-3SG give-CON flowers
 “Nobody would give flowers to ANNA”

c. *Annalle kukkia kukaan ei antaisi
 Anna-ALL flowers anybody not-3SG give-CON (Holmberg 2005:547)

The fronted constituent *Annalle* ‘Anna-ALL’ can then move to Spec, CP if it is focalized and “contrastive” with the subject *kukaan* ‘anybody.’ If the fronted constituent were an overt true expletive, it could only merge with Spec, IP. This restriction exists because the only purpose of the Finnish true expletive *sitä* is to merge with Spec, IP to check EPP when the 1st/2nd person subject is focalized or the verb is in the third person. A third constituent, for instance the object *kukkia* ‘flowers’ cannot be moved to a preverbal position (34c). However, these examples raise a further issue with regards to pro-drop and the properties of the subject being represented as Agr, as opposed to its presence as an overt and separate subject. While the topicalized constituent must be contrastive in a construction involving an overt subject, it does not have to

¹³ Please refer to section 2.1 for the general syntactic structure used in this thesis.

be contrastive with Agr when, for instance, the pronominal subject is fronted to check EPP (30a-b).

Pro-drop is optional but not obligatory in the 1st and 2nd person in Finnish. This is not the case when the subject is not only overt but focalized, which can be achieved in two ways: the overt true expletive is possible when the subject is in the sentence-medial focal position (35a) or the sentence-initial focal position (35b).

- (35) a. Sitä olen *minäkin* käynyt Pariisissa
EXP be-1SG I-too visited Paris-INE
'I have been to Paris, too (actually)'
- b. *Minä* sitä olen käynyt Pariisissa
I EXP be-1SG visited Paris-INE
'I'm the one who has been to Paris' (543)

However, the overt true expletive cannot occur and check EPP if the subject is dropped (31b, 29a). This set of data is evidence that the null 1st/2nd person subject is *pro* and checks EPP since the overt true expletive in Finnish cannot be merged with Spec, IP and satisfy the EPP when no overt subject occurs, as seen in (30)-(31a), although it can occur even in sentences with 1st and 2nd person subjects if the subject is focalized and not in Spec, IP, therefore not checking EPP. However, I argue that in OE, overt true expletives are not allowed (given that they are unattested) and that the quasi-argument *hit/it* appears when the verb is in the 3rd person (32) and not with a focalized 1st/2nd person subject. Holmberg does not distinguish the weather quasi-arguments from the true expletive, which further complicates the comparison. But because I argue that OE does not have overt true expletive *it*, I maintain that Finnish and OE do not have the same properties.

There are also a few cases in Finnish where the subject must be null. Quasi-arguments with weather predicates (36) must be null.

- (36) Sataa vettä
rains water-PAR
‘It’s raining’ (Holmberg 2005:540)

Holmberg does not go into detail to explain the lack of subject with weather predicates. I postulate that there is no quasi-argument because there is a phonetically null preverbal subject *pro*. The verb has not been focalized (in Spec, CP) and because it precedes the DP *vettä* ‘water-PAR,’ that DP cannot move to Spec, IP and check EPP. Visser (1970) states that in OE, these categories of subjects, particularly the weather predicate, were only rarely used without a subject in OE; for the most part, quasi-argument *hit/it* ‘it’ was overt in weather predicates (32a). Therefore, Holmberg’s syntactic properties of Finnish null elements in weather predicates are not really similar to the properties in OE.

In sum, the use of null and overt expletives in Finnish (*sitä*) and the consistently null true expletive in OE (*hit/it*, overtly) show that in general expletives in these two languages do not have identical properties. Finnish *sitä* can check EPP when the subject is 1st/2nd person, overt and focalized (35) in addition to the 3rd person verb, but a null expletive is obligatory with weather predicates (36). The OE overt quasi-argument *hit/it* also can check EPP. Unlike Finnish, the OE quasi-argument can be overt or null (although rarely) in weather predicates (32). Although the properties of Finnish and OE null and overt expletives conflict, partially because Holmberg groups quasi-arguments and true expletives together, Holmberg’s analysis of Finnish *pro* can be applicable to OE in determining whether overt true expletive *it* is represented by *pro* when null. I postulated that Holmberg’s evidence for weather verbs implies that the null quasi-argument is an EPP checking *pro*. However, because Finnish and OE expletives have conflicting characteristics when both null and overt, this set of facts about the two languages could have

larger implications regarding the differing syntactic roles that overt expletives can have within languages that seemingly allow both Move/Merge and verb movement to check EPP.

4.4 Aspects of Analyses relevant for Old English

Although OE has null subjects, its status as a NSL is contradicted by the analyses of NSLs by J&S (1989) and A&A (1998). According to J&S, languages can have the pro-drop parameter in paradigms which are either uniformly derived (with rich verbal morphology, like Italian) or uniformly underived (with no verbal morphology, like Chinese). OE, despite having a great deal of verbal morphology, does not demonstrate pro-drop of thematic subjects nearly as frequently as the derived paradigm pro-drop languages. A&A characterize NSLs as checking EPP by verb raising, as opposed to Move/Merge XP or X°. Since OE for the most part has overt pronominal thematic subjects, which cannot be explained by verb raising, I consider the two other EPP checking methods (section 6.1).

In order to create a timeline of OE null subject loss, I consider a statement made by J&S (1998): all languages which have null thematic subjects have null true expletives, but the reverse is not necessarily true. If this is the case diachronically as well as synchronically, then null thematic subjects in OE would be more restricted in any synchronic stage and lost before null true expletives. Since quasi-argument subjects are similar both to true expletives in not receiving a theta role and to thematic subjects in being able to bind PRO, it is not clear from these descriptions alone which subject type it would follow.

Both J&S (1989) and Holmberg (2005) propose requirements for thematic *pro* to be present and to check EPP. According to J&S, Agr can identify an empty category as *pro* if Agr (in many cases a finite verb raised to I°) governs the empty position. This statement can be used

to account for null thematic subjects and null quasi-argument *hit/it*, as well as contribute to Williams' account of null expletive *there* in existential structures (section 5.3). Considering the Finnish examples with weather verbs, I postulate both the Finnish null quasi-argument and null counterpart of OE quasi-argument *hit/it* to be *pro* with weather verbs. However, while Finnish true expletive *sitä* can only check EPP if the verb is in the 1st/2nd person and the 1st/2nd person subject is overt and focalized, the OE true expletive *hit/it* does not appear to be overt in that stage.

5 Overt Expletive *it* in Old and Modern English

5.1 Visser's (1970) Description of *hit/it* and its Null Counterpart in Old English

The status of null and overt subjects in OE is complicated by the apparent co-existence of these elements in the grammar. In particular, the uses of overt quasi-argument¹⁴ *hit/it* sometimes mirror modern usage (as with weather predicates “**It** is raining”), but some do not have similar modern equivalents (for instance, some uses for time of day including “**It** began to dawn”). The uses of *hit/it* as a non-referential subject discussed by Visser (1970), which are relevant for my discussion appear in clauses corresponding to: weather; time of day or season of year; space, distance, or length of time; and book quotations. Null non-referential subjects, on the other hand, can occur like overt quasi-argument subjects, in constructions involving weather, the time of day, or book quotations, as well as in coordinated sentences or in situations where the subject is “understood” (which I take to mean “understood as the subject of previous discourse”). I discuss these different cases in detail below.

First, the use of overt quasi-argument *hit/it* with a weather predicate is characterized by a large number of weather verbs (p. 36). These include *freosan* ‘to freeze’ (37) *hagolian* ‘to hail,’ *lihtan* ‘to lighten’, *rinan* ‘to rain’ (38), *sletan* ‘to sleet’, *sniwan* ‘to snow’, (38) *styrman* ‘storming’ (38), *pawian* ‘to thaw’, *wederian* ‘to exhibit a change of weather’ (which later fell

¹⁴ For a discussion of quasi-arguments, see section 2.2.

into disuse).¹⁵

(37) swa on niht þonne *hit freoseþ* (Blickl. Homl. 93, Visser 1970:36)
as on night then it freezes.PL

(38) *Hit rine* and *sniwe* and *styrme ute* (Ælfred, Bede 2, 13, Visser 1970:37)
It rains and snows and storms come

These verbs were generally used with overt quasi-argument *hit/it*, but Visser expresses that they were occasionally, though rarely, use without a subject in OE (Visser 1970:4). For instance, in the poem “The Seafarer,” the subject of *sniwde* is null (39).

(39) Nap nihtscua, norþan sniwde (Visser 1970:36)
grow.dark night-shadows, from.the.north snowed (OEME)
“Night-shadow darkened; snow fell from the north” (Glenn 1982)

Visser reports additional weather verbs in Middle English (ME), many of which are very similar to their reflexes in MnE. These include *blowen* ‘to blow (i.e. the wind)’, *calmen* ‘to calm (down)’ (40), *cleren* ‘to clear up’ (40), *cloud up* ‘to become cloudy’, *drizzlen* ‘to drizzle’, and *wet* ‘to precipitate’ (p. 36).

(40) þan gan it to *calme* and *clere* all aboute (1399 Langl., Rich. Redeless III, 366)
Then drive.back it to calm and clear all about
“Then it drove everything around back, it calmed down and cleared up.”

Visser notes that the phrase *it sleteth* ‘it is sleeting’ was in use with an overt quasi-argument *hit/it* around 1340, but in Old English the subject was generally null. This change from appearing with a null subject to an overt subject mirrors an overall change from the use of null quasi-argument subjects to overt quasi-argument subjects.

Quasi-argument *hit/it* is also used in OE through MnE to express the time of day or season of the year. For instance, the verb *dagian* ‘to dawn’ (41a) and *æfnian* ‘to grow towards

¹⁵ Glosses for the OE examples are not provided in Visser. Therefore, all translations are my own, with help from either Wiktionary or the Old English Made Easy web pages, cited in the references.

evening' (41b) are used with the quasi-argument subject *hit/it*.

- (41) a. Mid þam þe **hit** dagode (Ælfric, Saints' Lives, Visser 1970:37)
when it dawns
b. Oþþæt **hit** æfnode (Ælfric, Lives S, Visser 1970:37)
until it grows.towards.evening

Neither verb is currently in use, but the ME reflex of the verb *dagian* 'to dawn' was *dawnen*.

Other uses of OE quasi-argument *hit/it* that convey time of day (for example "It is night") continue to be used in MnE. This category can also appear in OE with a null quasi-argument subject (42).¹⁶

- (42) Now *es* arly, now *es* late, Now *es* day, now *es* nyght
Now is early, now is late, now is day, now is night
"Now (it) is early, now (it) is late, now (it) is day, now (it) is night" (Pr. Consc.; Visser 1970:4)

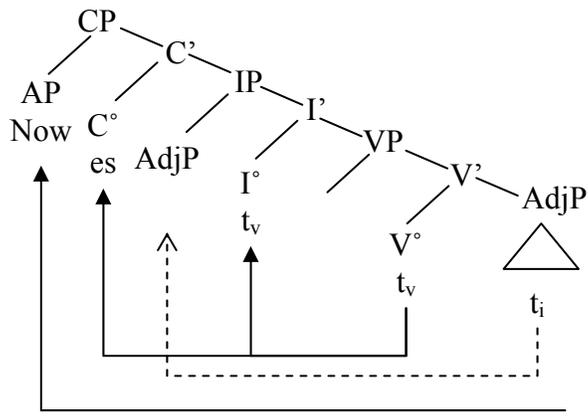
Null quasi-argument subjects are also possible in coordinated sentences, another situation in which a subject, referential or not, can be null in OE (Visser 1970:5). Although Visser demonstrates that the second or third coordinated subjects may be null, example (42) shows that preceding and subsequent coordinated subjects can be null as well.

Alternatively, another element could check EPP and allow the nullness of the quasi-argument subject by moving to the focalized or topicalized position. This process is attested in Finnish. In Holmberg's analysis of Finnish, any phrasal element could move to Spec, CP while the subject in the IP checked EPP. However, unless the subject was overt and focalized in some way, it was impossible for the true expletive *sitä* to merge in Spec, IP. In OE, it is possible that the movement of the DP *arly* 'early' in (42) actually checks EPP¹⁷, disallowing the merge of a true expletive subject, as illustrated in (43a). However, if this is the case, it raises two questions.

¹⁶ The placement of the null subjects is not indicated in the examples because it was not indicated in Visser.

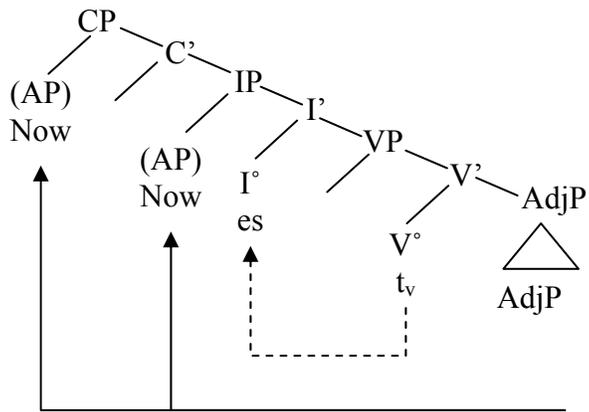
¹⁷ For a full discussion of the EPP, see section 2.4.

(43) a.



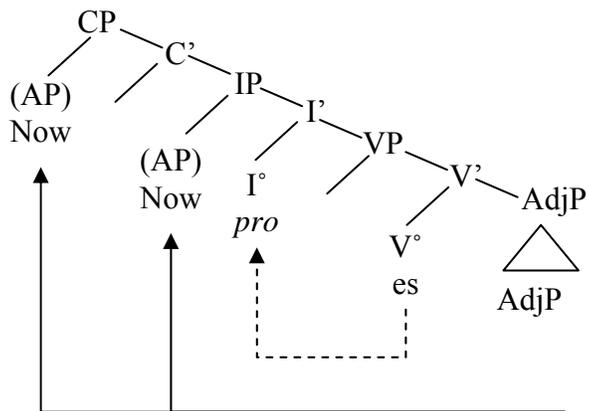
Now *es* arly,...

b.



Now *es* arly,...

c.



Now *es* arly,...

First, if the presence of a phrasal element in Spec, IP can allow the subject to be null, then why is the occurrence of a null subject that infrequent in OE? I argue that this null element is a by-product of the impersonal constructions, where a dative DP moves to Spec, IP and disallows a merged expletive. In contrast, if there is a null phrasal element that initially merges in Spec, VP, would it be *pro* (a phonetically null DP with a theta role) or would referential *pro* no longer exist? In impersonal constructions where I argue a dative DP moves to Spec, IP to check EPP (section 5.2), there can additionally be a nominative DP with the second theta role. However, these nominative DPs are all full DPs, not pronouns, which might be the characteristic which allows it to be null. In contrast, if EPP is instead checked by Move/Merge X°, could either a null quasi-argument (*pro*) be in I° or could a verb move to I° to check EPP, somehow allowing the quasi-argument to be null? However, because either could be a viable option for the syntactic structure of (42), I have no reason to prefer the configuration in (43b) to (43a).

Space, distance, or length of time were also expressed by the use of overt non-referential *it*. For instance, Visser demonstrates the use of *hit/it* ‘it’ linked with the adjective *feor* ‘far’ in (44a).

- (44) a. *Hit feor on oðre wisan wæs* (Bede, Visser 1970:38)
 it far on remaining to.be was
 ‘‘It remained to be far (on)’’
 b. It is a long way to the sea (OED, Visser 1970:38)

This type of construction remains to be a use in MnE (44b); however, one could argue that the usage is not identical because in the OE sentence, the verb *wæs* ‘was’ is linking the expletive to the adjective *feor* ‘far’, while in the MnE sentence, *is* links the expletive *it* to the DP *a long way*. Additionally, although this verb is not a weather verb, its subject can still be a quasi-argument.

Lastly, *hit/it* and its null counterpart were used when quoting from books in OE, although

Visser classifies the null case (45a) as rare (p. 7) and the overt case (45b) as archaic or colloquial in MnE (p. 39).

- (45) a. on þissum godspelle _ sægð (Idem, Visser 1970:7)
on this.DAT gospel.DAT says
b. *Hyt cwȳð forðon...* (Byrhtferth, Visser 1970:40)
it accuses that

The usage with an overt expletive *it* is still attested in MnE: if one is talking about a book, a grammatical sentence would be “It says (in the book) that Ouagadougou is the capital of Burkina Faso.”¹⁸ However, the subject cannot be null in MnE. The preverbal DP in (45a) *þissum godspelle* ‘this gospel’ is dative and could very well be an example of the impersonal construction. OE impersonal verbs have two arguments: the experiencer, which is either dative or nominative, and the theme, which is either genitive or nominative (see next sub-section). However, because it could be referring to the book or author, *hyt* ‘it’ could be referential and therefore I will not include it in my evidence for some cases of overt quasi-argument and true expletive subjects¹⁹. Visser does cite cases which correspond to the impersonal construction, particularly with the verb *þyncan* ‘to appear, to seem’, which later became the verb *think* (46).

- (46) *me þyncheð þat mi fæder nis no whit felle* (Layamon, Visser 1970:26)
1P.SG.DAT seem that 1P.SG.GEN father is.neg neg whit sane
“I think that my father is not [a whit] sane”

Although *me.think* is used occasionally in MnE when referencing an older stage of English, the way the dative pronoun *me* is used in (46) may be evidence of the impersonal construction.

Lastly, Visser states that null subjects can also appear where the subject is understood. This type of construction includes situations such as (47a), where the criminal is understood as

¹⁸ It can be argued that *it* in this case is referential and refers to a book, but that raises the question of whether a book can be the subject of the verb “says” with the co-occurrence of the PP “in the book” added after the verb.

¹⁹ For a discussion of the types of subjects used, see section 2.2.

the subject, or exhortations where the subject is assumed to be the third person plural (47b). These situations in which the subject is assumed or understood could mean that the agreement on the verb satisfies

- (47) a. *Gif frogman cyninge stele, IX gylde _ forgyld* (Ethelberht, Visser 1970:9)
 If frog king steal, 9 gold is.condemned
 “For stealing the king’s frog, (the criminal) is condemned to [give] 9 gold [pieces]”
- b. *Gemunan symle . . . meotodes strengþo* (Idem, Visser 1970:9)
 is.mindful involved . . . fate strength.GEN
 “We are mindful of the involvement . . . of fate’s strength”

EPP, especially in the case of (47b), where the verb is fronted and therefore the EPP would not be satisfied by Move/Merge XP. In (47a), it is not clear whether the verb is fronted to satisfy the EPP or not, but this configuration may result simply from the fact that overt constituents are also fronted to the left of the verb. In coordinated sentences where the second or third subjects are null, the same situation arises: EPP is checked by the subject of the matrix clause and the agreement suggests that the null subject co-refers with the subject of the matrix clause.

Overall, it is difficult to classify OE null and overt quasi-argument and true subjects in comparison to null and overt thematic subjects. Many of the situations in which the counterpart to quasi-argument *hit/it* appears in OE can allow null subjects, for instance with weather verbs, time of day, or season of the year, but these null subjects are “rare.” Their existence at all brings into question the situation of null quasi-argument or true expletive subjects in relation to other languages with possibly null expletives alongside null thematic subjects (Icelandic, Hebrew, etc.). However, what is relevant from Visser’s (1970) account of OE are the null and overt non-referential subjects in constructions of weather, time of day, season of year, and book quotations. The rare null cases are important to note because of their existence alongside the lack of overt

true expletives in the language.

5.2 Fischer et al. (2000) and the OE Impersonal Construction

Fischer et al. (2000) describe the syntax of Old English (OE) and Middle English (ME). There are three empirical phenomena in OE and ME that pertain to the rise of “expletive” *it* as it appears in Modern English (MnE). The first is “expletive pro-drop,” which is an extension of the pro-drop parameter, which had a positive value for OE speakers, according to Fischer et al. The second is the “impersonal” verb construction. The last empirical phenomenon is the loss or restriction in the possibility of finite verb movement.

According to Fischer et al, the possibility for pro-drop existed in OE and ME. Because of this assumption, there was a possibility for “expletive pro-drop” in which the DP (in this case *hit/it*) could optionally not appear at surface structure. However, it is important to note that these are only phonologically null subjects of finite verbs, as *pro* is.²⁰ Fischer et al. maintain that this type of null subject was allowed with weather verbs²¹ and impersonal passives (48), explained below, where there was no other nominative subject or “dummy-*it* insertion” (i.e. the insertion of true expletive *it*) (p. 39).

- (48) ...ðatte forðy to ungemetlice ne sie geliðod ðæm scyldgan
that therefore too greatly not be let-off to-the guilty
“...that therefore it must not be let off too greatly to the guilty.” (CP, Fischer et al. 2000:39)

If OE were a NSL, pro-drop could occur because of the pro-drop parameter and the presence of φ -features on the verb. In Middle English, “expletive pro-drop” also occurred, but it was present

²⁰ For a discussion of *pro*, see section 2.3.

²¹ See section 2.2 for a discussion of quasi-argument subjects and 5.1 for their relevance in OE

less and less until the insertion of true expletive *it*²² became the rule around 1500 (p. 71). This change coincides with the increasing loss of inflection on verbs and therefore the need for ϕ -features on the inflectional head to be checked by the nominative DP. However, the infrequency of pro-drop in comparison to null subject languages, like Italian, which allow pro-drop by checking EPP²³ with verb movement, demonstrates that it is unlikely that verb movement is responsible for checking EPP. In addition, the reduction of ϕ -feature realization on verbs might mean that the method of EPP satisfaction in OE is not verb movement since the types of verb movement in OE (V-to-I and I-to-C) are lost in later stages of English.

One seemingly subject-less OE construction that could be arguably included in the category of pro-drop constructions is the OE “impersonal construction,” which continued into ME. According to Fischer et al, this construction is defined by a lack of nominative subject and a third-person singular “default” verb (p.44). Further, there are a set of “psych” verbs that assign theta roles of animate experiencer and the cause or source of the experience. It has three configurations, in which the verb assigns the theta roles of experiencer and theme (49).

- | | | | |
|------|-----------------------------|--------------------|--------------------------|
| (49) | a. Experiencer – dative | Theme – nominative | |
| | b. Experiencer – nominative | Theme – genitive | |
| | c. Experiencer – dative | Theme – genitive | (Fischer et al. 2000:44) |

The dative can only be assigned the experiencer role (49a&c) and genitive the theme role (49b&c). Although a nominative subject with a theta role or a merged theta-less expletive is required in the MnE reflexes of these constructions, there was not necessarily a nominative subject in OE impersonal constructions (50). Both nouns follow the verb and, although the MnE translation assigns subjecthood to the pronoun ‘he,’ neither OE noun is necessarily the subject.

²² For a discussion of true expletives, see section 2.2.

²³ For a discussion of the EPP, see section 2.4.

- (50) *ðonne ofðyncð him ðæs ilcan ðe he ær forbær*
 then displeases him.DAT the same.GEN that he before endured
 ‘then he regrets what he endured before’ (CP, Fischer et al. 2000:44)

This configuration contrasts with the EPP requirement in MnE for there to be a noun with nominative case for all finite verbs, whether it has a theta role or not. In the OE case, there is a moved element *him* that might act to check EPP by moving to the Spec, IP position in the case of Move/Merge XP EPP checking (51a). The pronoun *him* could alternatively move to the I° position (if the pronoun is a clitic or phrasal head) if EPP is checked by Move/Merge X° (51b), or the verb is moved to I°. Therefore, this is not unambiguous evidence for either EPP checking method.

- (51) a. [_{CP}then displeases [_{IP}him.DAT_i t_v [_{VP}t_i t_v [_{DP}the.same.GEN that he before endured]]]]]
 b. [_{CP}then displeases [_{IP}_ him.DAT_i [_{VP}t_i t_v [_{DP}the same.GEN that he before endured]]]]]

Secondly, the experiencer of an OE impersonal construction is always a DP, but the theme could also be realized as a clause (52).

- (52) *Us gelustfullað gyt furður [to sprecenne be ðan halgan were Iohanne]*
 Us.DAT delights yet further [to speak of the holy man John]
 ‘It delights us to speak yet further of the holy man John’ (ÆCHom I, Fischer et al. 2000:45)

This configuration is more or less exemplary of the instances in which expletive *it* are used in ME and then MnE, as the equivalent MnE phrase shows. The dative noun in phrase-initial position would satisfy a condition that OE is verb second (or third in some cases) in the matrix clause. There are a set of seven verbs which have a clausal theme almost exclusively: *(ge)byrian* ‘happen’; *gerisan* ‘agree’; *gedafenian* ‘beseem’; *behofian* ‘behove’; *(ge)lympan*, *(ge)weorþan* ‘happen’; and *þyncan* ‘seem’ (Fischer et al. 2000:45). Since *seem* in MnE does not assign a theta

role to the subject position and does assign a theta role to the subordinate clause (53), this syntactic property has been passed down from OE.

- (53) & him ðuhte, ðæt...
and him.DAT seemed that
“and it seemed to him that...” (Fischer et al. 2000:46)

As discussed in the previous section, the use of *it* without thematic status is attested even in OE.

In OE, quasi-argument *hit/it* was used mostly in weather phrases (54).

- (54) On sumera hit bið wearm and on wintra ceald
in summer it is warm and in winter cold
“It is warm in summer and cold in winter” (Ælfred, OED 1996)

Because the subject is a quasi-argument, as defined in (4), this example may not be an instance of a true expletive and is not included in the possibilities of expletive pro-drop.

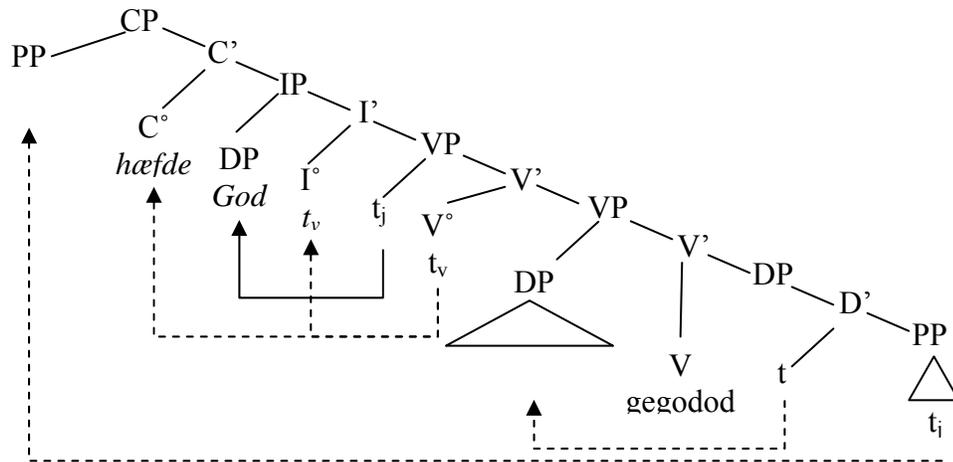
There was also a great amount of finite verb fronting in OE, which allowed V-to-I and I-to-C movement. According to Fischer et al (2000), all finite verbs could be fronted in OE in questions (55a) and negative-initial (55b) sentences.

- (55) a. Hwæt sægest þu, yrþlinge? Hu begæst þu weorc þin?
What say you, ploughman? How perform you work yours? (ÆColl, Fischer et al. 2000:40)
- b. ne sende se deofol ða fyr of heofenum, þeah ðe hit ufan came
not sent the devil then fire from heavens, though that it from-above came
(ÆCHom I, Fischer et al. 2000:40)

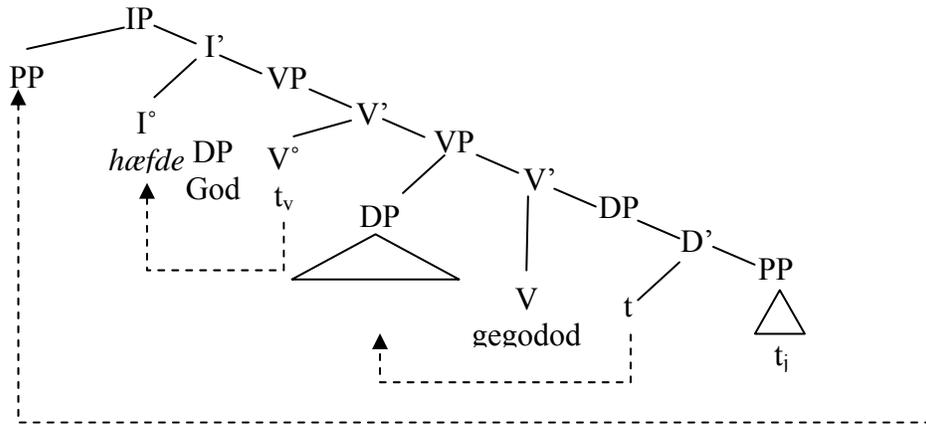
This fronting strategy was lost for main verbs in early MnE but retained for auxiliaries. The reasons given by various scholars for this loss are the subject of debate (see Lightfoot 1997, Roberts 1993, Warner 1997) but include the creation of modal auxiliaries from a set of finite OE verbs, the rise of *do*-support, and the loss of regular V-to-I movement. In addition, verb movement could occur following a topicalized element (56). In this example, the PP *on twam þingum* ‘in two things’ is moved to a position higher than the verb *hæfde* ‘had’ is moved to. The

nominative DP (in this case *God*) is not obligatorily preverbal as it is in MnE because EPP is satisfied in one of two ways. First, the verb could move to I° (56a,b), then possibly move to C° (56a), allowing the EPP method to be Move/Merge X°. However, the latter is not obligatory especially given that the DP *God* could still satisfy the EPP by merging into Spec, IP (56a). In addition, if the EPP checking method is instead Move/Merge XP, and the verb did not move to C°, then the dative PP would move to Spec, IP (56b).

(56) a.



b.



c. On twam þingum *hæfde* God þæs mannes sawle gegodod
 in two things had God the man's soul endowed (ÆCHom I, Fischer et al.
 2000:40)

However, OE has very few verb-initial sentences and is considered by many scholars to be V2 or V3. From that argument, it would follow that the PP or any other fronted element would check EPP by Move/Merge XP to Spec, IP in OE despite the verb movement. This entire argument hinges on whether or not OE requires elements in the CP, which I have not seen to be the case in the data.

5.3 Williams' (2000) Proposal for Old English Expletive *there*

Williams (2000) describes the OE and Early Middle English (EME) existential structure, which contains what he describes as the “expletive” *there* (which I will call non-locative *there*). This construction is shown in (57), where he argues the non-locative *there* is null, and (58), where the non-locative *there* is overt.

(57) Nis buten an godd, as ich ear seide, þt al þe world wrahte
not-is but one god as I before said that all the world wrought
‘[There] is but one god, as I said before, that wrought all the world’ (St. Katherine,
Williams 2000:164)

(58) Ah *þer* nis buten an godd þurh hwam witerliche ha all weren iwrahte
but expl not-is but one god through whom certainly they all were wrought
‘But there is just one god thorough whom certainly they all were made’ (St. Katherine,
Williams 2000:164)

In these cases, the overt non-locative *there* occurs before the verb while Williams takes the null non-locative subject to be post-verbal, but the remainder of the structure itself is almost identical. Williams presents proportions of null non-locative *there* occurring in existential constructions like those in (57) and (58) in approximately 100 year periods, showing the pronounced decrease in null non-locative subjects during EME (beginning in period 2), reproduced in Table 2 below (p. 169). Full DP subjects can additionally follow the finite verb when something else is in the

clause-initial position in EME. However, in canonical declaratives, a pronominal subject always precedes the finite verb, even when something else is in clause-initial position (59). Turning

Table 2: Existentials with vs. without non-locative *there* for all verbs

Period	<i>there</i>	no <i>there</i>	% without <i>there</i>
1 (1150-1250)	28	70	71%
2 (1250-1350)	41	7	15%
3 (1350-1420)	179	60	25%
4 (1420-1500)	154	32	17%

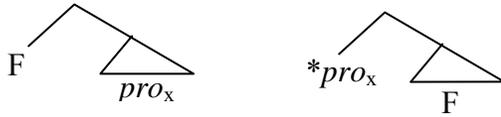
- (59) His louerd *he dede* arst Michel harm
 his lord he did first much harm
 ‘He did much harm first to his lord’ (Vices & Virtues, Williams 2000:165)

to the quasi-argument²⁴ *hit/it*, a possible parallel to the development of non-locative *there* could explain weather predicates, where a null quasi-argument *hit/it* is possible but “rare” in OE. Williams (2000) also makes an additional assumption about EME syntax: null pronouns would distribute like overt pronouns in the syntax, following arguments by Pintzuk (1996) and van Kemenade (1987). This assumption can be relevant for OE non-locative *there* and quasi-argument *hit/it* because it provides a prototype according to which these subjects can be analyzed. Unlike the Finnish quasi-argument *sitä* that is obligatorily null in weather constructions (Holmberg 2005), the OE quasi-arguments are pronominal subjects that have syntactic properties similar to their thematic counterparts, so that in the constructions in which *sitä* is necessarily or optionally null, OE quasi-arguments are generally overt. In addition, examples of OE declaratives with null thematic subjects are sparse but possible. Williams (2000) argues that since some of their overt counterparts undergo locative inversion, the null non-locative *there* that appears in canonical declaratives is rather the result of subject-verb inversion (p. 166). From the above assumptions, he postulates that in OE, like Germanic, non-

²⁴ For a discussion of quasi-arguments, see section 2.2.

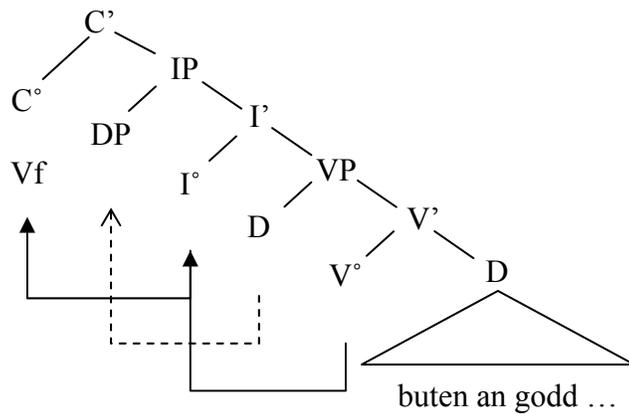
locative *there* may be null in a canonical declarative if the finite verb position (F) c-commands the non-locative subject (60).

(60)



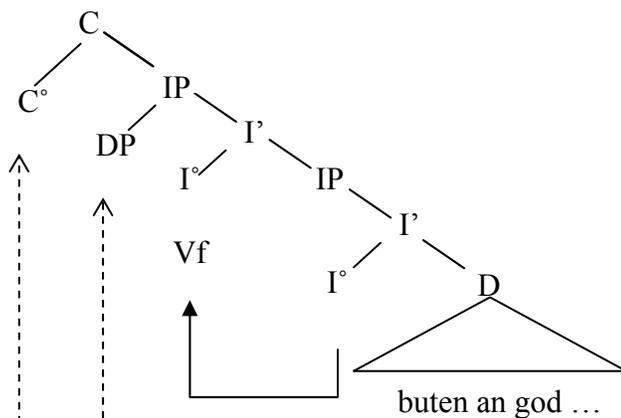
Given Williams' analysis, the syntactic representation of an OE sentence with a null "expletive" could only be represented as the one in configuration (61a), while an overt non-locative *there* could have an alternate representation (61b).

(61) a.



Nis Ø buten an god...
not-is expl but one god...

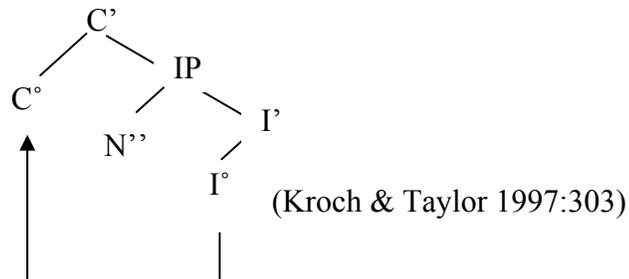
b.



Ah þer nis buten an god...
but there not-is but one god...

The configuration in (61) is loosely based on Kroch & Taylor's (1997:303) "Narrative Inversion" representation in (62).

(62)



(63) On sumera hit bið wearm and on wintra ceald
 in summer it is warm and in winter cold
 'it is warm in summer and cold in winter' (Ælfred, OED 1996)

The nearly identical constructions in (61) differ pointedly in terms of allowing (61a) or disallowing (61b) I-to-C verb movement, depending upon the movement of other elements. According to Williams, this distinction has direct implications for the DP in Spec, IP in both: the movement of the finite verb with the features in I° to C° in (61a) provides motivation for phonological nullness of the non-locative *there*, which is not possible in (61b). Because both thematic and non-locative subjects have similar syntactic distributions in the IP domain, these representations could also apply to the weather quasi-argument *hit/it* (63), which can appear before the verb, like overt thematic pronominal subjects.²⁵

The analysis proposed by Williams is contingent upon verb raising. A possible consequence of this analysis is that because verb raising is restricted to few constructions in MnE, such as *wh*-questions, the conditions and environments in which null expletives could appear in OE are slowly lost. If Williams' analysis correctly accounts for the structure of OE quasi-argument

²⁵ Refer to section 2.2 for the distinctions between thematic and quasi-argument subjects.

hit/it, then his analysis would explain the eventual loss of null quasi-argument subjects alongside null thematic subjects. However, his analysis does not seem applicable for the null true expletive *it* (defined in section 2.2), which is the rule rather than the exception in OE, unlike the rarely null quasi-argument *hit/it*.

Of course, Williams's proposal presents the phrasal distribution that would allow expletive *pro*²⁶ in OE, but in MnE the expletive is required to be overt in active phrases, in cases in which the verb no longer raises to C°. This path of movement could explain how pronominal subjects in MnE would be always overt: the pronoun ends up in pre-verbal position, which disallows null pronouns. However, this discussion touches upon the issue of raised verbs in sentence structures such as questions, which behaved alike between OE and MnE. Examples such as “Who is it that went to the store?” or “Why is it necessary to go to the store?” might optionally have null expletive subjects in OE and the element *why* would occupy Spec, CP. However, Williams considered in detail only declaratives, not questions, so the characteristics of each might differ even in OE. Either way, Williams' hypothesis about the alternation between overt non-locative *there* and a null counterpart could have some correlate in the behavior of the overt quasi-argument *hit/it* and its null counterpart, approximately around the same period between OE and MnE.

Williams' analysis carries a few implications. First, the verb must be moved to a position above Spec, IP for the subject to be null. This movement would not be required within A&A's proposed EPP²⁷ checking method of verb movement because the verb moves to I° in those instances while Williams' model requires the verb to move higher than Spec, IP (to C°).

²⁶ For a discussion of *pro*, see section 2.3.

²⁷ For a discussion of EPP, see section 2.4

Second, this hypothesis does not substantially distinguish syntactically between thematic and non-thematic subjects. For instance, I assume that Williams' "expletive" *there* has the properties of a true expletive, particularly in not having a theta role. However, Williams does not mention that *there* is first merged in Spec, IP or how *pro* can be merged, especially since his proposal relies upon the verb moving to allow the null counterpart of non-locative *there*. In all, Williams' proposal relies upon certain assumptions, particularly the patterning of non-locative *there* like thematic pronouns. Therefore, his argument would only apply to quasi-argument *hit/it*, not true expletive *it*.

5.4 Relevant aspects of OE analyses

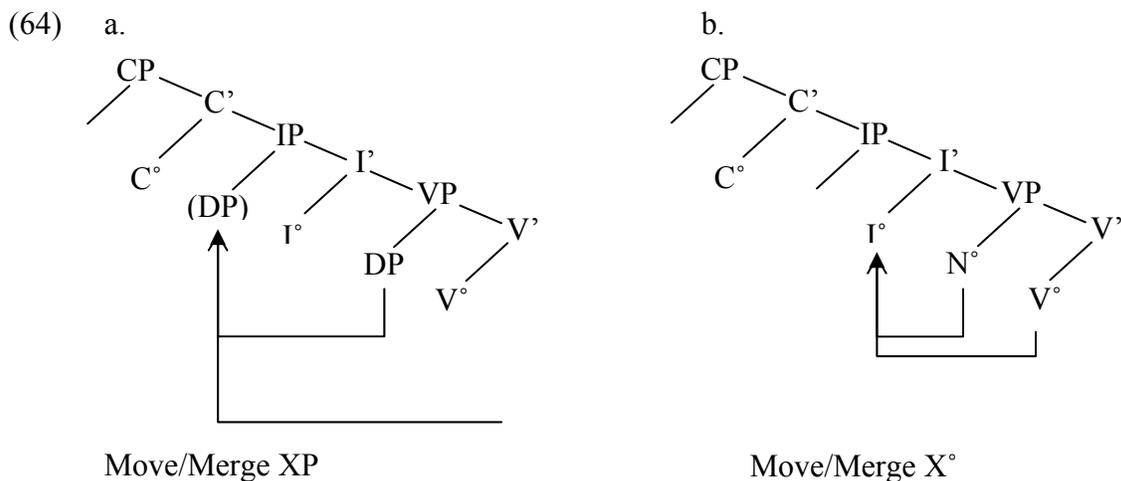
Various facts of the preceding analyses are relevant for my analysis of OE null subjects. Visser (1970) states that thematic subjects can be "assumed from the context" if they refer to God, the Devil, or a criminal in law proceedings (section 5.1). OE quasi-arguments are rarely null (Visser 1970), but Williams' (2000) proposal for null non-locative *there* in OE existential constructions can be applied to account for the few null cases (section 5.3). This argument requires the assumption that null pronouns pattern like their overt counterparts and that the non-thematic subjects pattern like thematic subjects. Although this assumption applies to quasi-arguments, I contend that true expletives do not pattern like the other two types of subject. From these arguments and observations, I posit that in OE quasi-argument *hit/it* is represented by *pro* when null. However, I will also argue in section 6.1 that true expletive *it* can only be merged when necessary for it to be overt to check EPP, meaning that it does not have a null *pro* counterpart. Visser describes the constructions for time of day and season of year as rarely null, so I will include these in the category of quasi-arguments. Lastly, true expletives, which are in

the MnE reflexes of the impersonal construction, are conversely rarely overt if present at all in OE, but are rarely null by around 1500 AD (Fischer et al. 2000, section 5.2). This fact will bear upon the model of null subject loss that I explore in section 6.2. The verb in impersonal constructions can also assign the experiencer theta role to dative pronouns and, more frequently, dative full NPs, which I hypothesize (in section 6.1) can check EPP by moving to Spec, IP.

6 Diachrony of Null and Overt Subjects

6.1 The EPP Checking Method of OE

In order to explore the syntactic changes that occurred between OE and MnE, I will first determine the method by which OE checked the EPP (discussed in depth in section 2.4) The various movements that are possible to check EPP are illustrated in (64), where the solid lines represent the movements of elements that can standardly check EPP. Cross-linguistically, EPP can also be checked by the direct insertion (merge) of a true expletive element into the appropriate node of IP. However, I assert that the lack of true expletive *it* in OE disallows this possibility. In what follows I take the analysis in (64a) to be the most successful one to account for the properties of OE.



We need to reconcile two sets of facts in OE in order to determine the applicable EPP checking method for OE. The first corresponds to null subjects with theta roles (thematic and quasi-argument) or without theta roles (expletives).²⁸ Thematic subjects are mainly overt as

²⁸ For a full discussion of the subject types, see section 2.2.

either full DPs or pronouns, which are considered maximal projections (or XPs) in many languages (for instance in MnE, a Move/Merge XP language) but can be phrasal heads or X° (including the clitics in Fiorentino and Trentino). However, Visser (1970) describes the limited possibility of null thematic subjects as assumed (that is, recovering their reference) from the discourse context. For instance, thematic subjects can be null in law proceedings where the criminal is assumed, and curses, where God or the Devil is assumed (and which borders on idiomatic). One possible explanation is that because it refers to an entity which has in theory been mentioned earlier (e.g. the topic of a criminal in a collection of laws would undoubtedly arise frequently), an earlier DP determines the reference of the null subject *pro*. Notice that many of the texts are written in a poetic or literary style, which may introduce different confounding factors. In addition, even speakers of MnE have been known to drop subjects in written media, such as in diaries and in online communication. These cases do not represent strong evidence in favor of either one of the analysis for EPP-checking in (64). For that reason, I do not focus here on the mechanism by which null subjects were allowed in a limited number of cases involving thematic and quasi-argument subjects.

The verb frequently raises at least to I° in OE if not also to C°. Since subjects can move from Spec, VP to higher nodes in both Move/Merge XP and Move/Merge X° approaches, preverbal and postverbal subjects can appear in languages that check EPP either way. However, to maintain the Projection Principle (see section 2.4), these heads and phrases must move to positions that preserve these properties. Assuming quasi-argument subjects have similar syntactic properties to thematic subjects in the grammar, if OE checks EPP by Move/Merge XP (64a), then the subject can appear pre-verbally, the thematic subject can move to Spec, IP to satisfy EPP and the verb moves to I° in examples (38), and possibly (32a). To appear post-

verbally, the DP thematic subject can move to Spec, IP while the verb moves to C°, as in (32b), (40), and (56).

If the EPP checking method were instead Move/Merge X°, then either a pronoun would behave as a clitic subject as in (38), or the verb, like in (56), and either would move to I° to check EPP (64b). However, this alternative finds much weaker support in the existing data.

The second factor that is relevant for a precise account of the EPP mechanisms in OE is that there are OE impersonal constructions that assign two theta roles, therefore requiring two N°s, two DPs, or one noun or noun phrase and one clause that are assigned the theme theta role. If EPP is checked in OE by Move/Merge X°, the verb can move to I°, as in in (6) and (46). Additionally, a dative DP can move to Spec, IP to check EPP while the verb further raises to C, as in (27b) and (50) (with an element such as *then* possibly appearing in Spec, CP). In this respect, one case that would not be easy to explain by Move/Merge X° is (29b), which has the preverbal full genitive DP *ma witenas* ‘more wisemen’.

Consider if the only way to check EPP in this case is by verb movement to I° because a noun cannot move as an N° to I°. Then there would need to be motivation for movement of the dative DP to Spec, IP or higher as well as motivation for the nominative case full DP not moving to Spec, IP. However, this EPP-checking method may indeed be the correct one. Consider, for instance, that Fischer et al. (2000) state that if the arguments in an impersonal construction are both full DPs, the likelihood that the dative DP precedes the nominative DP is high in both OE and in Germanic languages (p. 45). Since full DPs are not N° head elements, they could not check EPP under Move/Merge X°, and only verb raising to I° would be possible for Move/Merge X° to apply. However, this possible configuration could not explain how a verb can be at the same time preceded by a complementizer, a dative DP, and a nominative DP (65).

- (65) Gif *ðam gifran* ungemetlicu spræc ne eglde
 If the greedy.DAT eloquent speech.NOM not afflicted
 “If the greedy were not afflicted by loquacity” (CP, Fischer et al. 2000:45)

In this example, if the verb moves at least to I°, then the nominative DP would minimally need to move to Spec, IP while either the dative DP *ðam gifran* ‘the greedy’ and the complementizer *gif* ‘if’ would occupy the CP domain. This configuration would not be the most compatible one with Move/Merge X°. On the other hand, if OE was a Move/Merge XP language, as I argue here, then the dative DP moved to Spec, IP to check EPP while the nominative DP would remain in Spec, VP and the verb would remain in V°. However, the nominative DP occurred in Spec, IP, as in the first alternative above. Therefore, dative or nominative pronouns might behave as clitics and be able to move preverbally and check EPP through Merge X°, with an additional element in Spec, CP. However, full DPs can only move to Spec, IP and Spec, CP. It is because of these examples that cannot be explained through Move/Merge X° alone that I adopt Move/Merge XP as the EPP checking method for OE.

6.2 Explanations for the Loss or Decrease of Null Expletives after Old English

Given the analysis I outlined above, OE is similar to MnE because I posit that they both check EPP by Move/Merge XP. However, the loss of related properties of OE, such as the possible movement of dative and other case nouns to Spec, IP that would be disallowed in MnE, have implications for the properties of true expletives. One important distinction is the apparent lack in OE of overt merged elements and the necessity for them in MnE. In order to come to this conclusion, it was important to distinguish quasi-argument subjects (which appear with weather verbs) from true expletives (see section 2.2 for a thorough discussion of these distinctions).

According to the literature (Fischer et al. 2000, Visser 1970, Williams 2000), null quasi-argument *hit/it* is the most restricted in use in OE, followed closely by thematic subjects, and finally true null expletive *it*, for which I have found no evidence of it being optionally or obligatorily overt. In particular, I posit that the impersonal construction (which *prima facie* would be a case of null true expletive) in fact checks EPP with overt DPs assigned the theta role of experiencer or theme that move to the Spec, IP position. This transformation would disallow the use of null theta-less true expletives. This could be explained by comparing the number of constructions in which the three types of subjects can appear. Visser (1970) identifies three constructions in which null quasi-argument *hit/it* can appear, all of which require overt quasi-argument *hit/it* in MnE: weather, time of day, and season (see section 5.1). All of these are “rare” in OE, according to Visser, who also does not include impersonal or passive constructions in his description of OE null subjects. Fischer et al. (2000) introduce the possibility of “expletive pro-drop” in OE, which they take to be possible with both weather verbs and impersonal passives. However, if these two cases are actually divided into quasi-argument and true expletive *it*, as I suggest, then the frequency of null expletive *it* in these constructions would undoubtedly contrast. Fischer et al. describe OE weather verbs as “sometimes” having null subjects, while null expletive subjects were “regularly” used in impersonal constructions, pointing to distinct relative frequencies of null quasi-argument and true expletive *it* (the latter would be much more frequent).

From these perspectives, the order of least to most frequently null DPs in OE are quasi-argument *hit/it* (i.e. with weather verbs), approximately equal to but possibly less than thematic subjects, followed by true expletive *it*. This order contrasts with the proposed state of these three types of subjects, but it is important to note that there would be a contrast in the number of types

of constructions and frequency of thematic or expletive subjects in the texts, possibly because of the subject matter and writing style. Constructions which allow overt thematic subjects would be more frequent in the texts than those which allow overt quasi-argument and overt expletive subjects. However, if we assume that null subjects pattern like overt ones in the grammar, in terms of their total distribution per type, it would then follow that null thematic subjects might be more numerous than null expletive subjects. At the same time, their relative frequency could still be smaller. If these facts are accurate, then the stages of English could still follow the progression that I proposed in the introduction. The projected model from Table 1 is reproduced below.

Table 1: The stages of the loss of the null subject *hit/it* between Pre-OE and MnE

Stage	Null thematic <i>hit/it</i>	Null quasi-argument <i>hit/it</i>	Null true expletive <i>it</i>
1 (†Pre-OE)	† <i>Possible in general</i>	† <i>Possible in general</i>	† <i>Possible in general</i>
2	† <i>In restricted paradigms</i>	† <i>Possible in general</i>	† <i>Possible in general</i>
3 OE	In restricted paradigms	In restricted paradigms	† <i>Possible in general</i>
4	In restricted paradigms	In restricted paradigms	In restricted paradigms
5	Disallowed	In restricted paradigms	In restricted paradigms
6 ME (MnE)	Disallowed	Disallowed	In restricted paradigms
7 (MnE)	Disallowed	Disallowed	Disallowed

I argue that in the history of English, null thematic *hit/it* is restricted first. Next, in declining order or referentiality, the null quasi-argument *hit/it* is restricted. OE would fall in this stage of the model, stage 3, where null thematic and quasi-argument subjects are allowed only in restricted paradigms while null expletive *it* is possible in general. If the progression of English continues along this projection, then my model projects that null expletive subjects would be restricted next in the grammar. The null subjects would then be disallowed in the same order: null thematic *hit/it*, then null quasi-argument *hit/it*, then null true expletive *it*. However, parts of this table cannot be directly confirmed because of lack of current analyzed evidence from both

stages prior to and following OE, in addition to a more precise picture of the properties of true expletive *it* during OE.

6.3 *The Consecutive Rise of Overt Expletives*

In section 6.1, I argued that OE checks EPP in the same way MnE does, Move/Merge XP. However, there are additional changes to the structure after OE that eliminate many of the possible constructions that null subjects appear in. If Williams' proposal holds for all cases of null thematic and quasi-argument subjects, then the phonological nullness is dependent upon the movement of the verb to C°. Between OE and MnE, one major change was the loss of main verb movement (V-to-I and I-to-C). According to Williams, if the verb cannot move to C° (or through I° to C°), then thematic or quasi-argument *pro* is not licensed. This grammatical situation would lead to the full loss of null thematic and quasi-argument *pro*, which means that MnE would have the characteristics of stage 6 or later in 0 above.²⁹ In order to decide upon the exact stage that describes MnE, I examine true expletives. The constructions that Visser (1970) describes as continuing to be null through MnE are after certain conjunctions, such as *than* in “You have more circumspection **than** _ is wanted”, *as* in “...as well **as** _ could be expected for one in her position” (p. 8), and *and* in “It was the case **and** _ continues to be so.” Although these cases could be described as requiring *pro* in the preverbal position if anything is occupying that position, it is not possible to state that these cases are evidence that null true expletives are still possible in restricted paradigms in MnE. Therefore, despite the fact that MnE is generally described as having no null subjects, the presence of finite verbs without definite subjects in

²⁹ Since this seems to be the case even for ME, I would place ME in stage 6, though I lack definitive evidence.

some restricted cases still brings this statement into question and cannot allow me to state with certainty that MnE is in stage 7.

The loss of null true expletive *it* can be attributed to the loss of erosion of the case endings, particularly between nominative and dative full NPs, would cause confusion in the word order and theta role assignment. Since the experiencer theta role could be given to a nominative or dative DP, theta role assignment would begin to rely heavily on word order, as later stages of English counterbalanced many structural ambiguities. This type of confusion in theta role assignment also happens in double object constructions. For instance, (66a) is an example of the “double object construction,” where *the books* is the accusative DP and *Mary* is the dative DP. The similarity between accusative and dative case endings in both pronouns and full DPs continues to cause some confusion, despite the stricter word order. For example, (66a) can also mean (66b) but not (66c), since the order of double objects in MnE can be dative-accusative (66a) or accusative-dative (with the accusative italicized).

- (66) a. John gave Mary *the books*
b. John gave *the books* to Mary
c. ?John gave *Mary* to the books

There can be some confusion if only pronouns are used, for instance (67a), demonstrating the double object order, is more ambiguous than its semantic counterpart (67b).

- (67) a. John gave her *them*
b. John gave *them* to her

The verb in the impersonal construction can assign the experiencer theta role to either a nominative or dative DP and the theme theta role to a nominative DP, a genitive DP, or a clause, as in example (53) from section 5.2, reproduced below. In this situation, the loss of case distinctions can easily lead to ambiguity, as I believe led to the confusion in a stage following OE

- (53) & him ðuhte, ðæt...
and him.DAT seemed that
'and it seemed to him that...' (Fischer et al. 2000:46)

and resulted in the necessity for a new way to check EPP. I contend that this ambiguity is why MnE impersonal constructions frequently have merged true expletive *it* as its subject.

7 Acquisition of Null Subjects

7.1 Modern Child Acquisition of Null Subjects

In their study, Kirby and Becker (K&B 2007) use the CHILDES database to determine the order of acquisition of non-referential *it* as opposed to referential *it*. Their hypothesis is similar to the findings by Inoue (1991) in which children acquired expletive (non-locative) *there* before locative *there* (p. 586). In various studies of acquisition (Bates et al. 1994, Carey 1978, Gentner 1982), reference has driven acquisition in the earliest stages. Because of the importance of referentiality in acquisition, these authors agree that a non-referential word, for example a true expletive, would not appear until a later stage of acquisition. However, Shafer and Roeper (S&R 2000) find in their study of expletive *there* that although the expletive came after the deictic-locative *there* (one that is more referential), they also find that the anaphoric *there* (or one that refers back to a locative meaning in a previous part of the discourse) came after the expletive *there*. S&R postulate that in their study, the acquisition of expletive *it* will not only come after the deictic *it*, but it will also come after the anaphoric *it*. K&B tested the data S&R used in their study, preserving the subjects' approximate ages to keep the data consistent.

K&B's results match their hypothesis and contrast those of S&R. They find that the first non-referential *it* was atmospheric (68a). The next was one co-occurrence with the noun happiness (68b), which is ungrammatical in adult English. Finally, children produced time constructions (68c). I consider all of these to be quasi-argument subjects with the properties discussed in section 2.2. According to Kirby and Becker, these results show a "scale of

referentiality,” in which arguments and non-arguments are at either end. Quasi-arguments, which have the same properties as the quasi-arguments in (4),

- (68) a. is it raining? (peter15)³⁰
 b. now it happiness now (eve14)
 c. it’s fourteen o’clock (adam20) (K&B 2007:580)

fit somewhere between referentiality and non-referentiality (p. 580-1). Then the (true and quasi-argument) “expletive” *it* appeared two to seven months after the deictic and anaphoric (i.e. thematic) *it*, as I further discuss below. The acquisition takes place in two main stages (from deictic/anaphoric to “expletive”). The first recorded ages at which the children produce the types of pronoun *it* are shown in Table 3.

Table 3. Age of appearance for referential pronoun *it* and expletive *it*

Child	Deictic/ Anaphoric	Expletive (first pass)	Expletive (earliest)
Adam	2;3	2;6	2;6
Eve	1;6	1;12	1;11
Nina	1;11	2;2	2;1
Peter	1;9	2;6	2;4

Unlike S&R’s findings for *there*, K&B argue that children acquire these meanings of *it* in an order of declining referentiality. Children acquire the referential (thematic) pronoun, then hear sentences in which there is no obvious referent and must alter the properties of their lexical entry to include other levels of referentiality, or input a new lexical entry with less reference, for instance a quasi-argument subject. This stage is the point in child acquisition that K&B argue anaphoric meaning would be acquired. Then the transition from little reference in quasi-arguments to no reference is made, and true expletives enter the child’s grammar.

³⁰ The citations are K&B’s notations for the speakers and their data collected from the CHILDES database.

Similarly, Inoue (1991) argues that expletive *there* was the result of the locative meaning weakening after the child learns that two locative phrases cannot be used in the same sentence unless they are in a hierarchy (69).

- (69) a. A book is [on the table] [in the kitchen]
b. There is a polar bear [in the kitchen]

In (69a), *the table* would be in *the kitchen* but *the kitchen* is not characterized by having *the table* in it. This assumption could be inferred from (69b), which would be ungrammatical if *there* had locative meaning and would need to be in a hierarchy with the phrase *in the kitchen*. According to K&B, this process is how children come to identify true expletive *it*. First, children have access to a referential *it*. Then they perceive phrases in which *it* has no referent, just as *there* had no locative meaning in (69). Weather and time constructions would be the most prevalent non-referential examples that a child is exposed to, where *it* would not refer to anything specific in their mapping of the world. Therefore, this hierarchy illustrates the order in which children would produce the meanings of *it*: referential to partly referential (quasi-argument) to non-referential (true expletive).

The results from K&B's study track the children's progression of production in terms of referentiality of *it*. However, the question remains of whether the acquisition of these different meanings of *it* come before the child can produce them or if the child acquires and produces some or all of these meanings at the same time. K&B's study does not necessarily track the child's perception or acquisition of the distinctions in referentiality of *it*. If production matches acquisition in general or at least in this situation, then the children acquired the different meanings of *it* in order of decreasing referentiality. K&B found that these stages are separated temporally by two to seven months. If this finding is accurate, the underlying mechanisms

involved here may also have implications for the progression of overt expletives in the history of English.

7.2 Child Acquisition and Loss of OE Null Subjects

If this order of subject acquisition by decreasing referentiality is consistent with the acquisition process in general, it is possible that there is more or less a general progression in English (or in languages in general, considering J&A's (1989) general statement about null thematic versus expletive subjects) in which children will decide whether a subject can remain null or if it must or overwhelmingly can be overt. The need for the overt subject would be considered by children in this order with the decision being the lack of necessity for an overt merged true expletive *it* (described in section 2.2). For instance, in OE, children would first encounter thematic subjects and although they perceive them to be overwhelmingly overt, there is still the possibility for them to be null. Next, parallel to the acquisition in K&B's (2007) study, the child would be confronted with evidence for an overt quasi-argument *hit/it* and, despite some evidence of it being null, would allow the quasi-argument to be null in only in certain cases, while overwhelmingly using the overt counterpart.

However, there would not be evidence of overt true expletives in the child's PLD. Children acquiring OE would encounter the impersonal construction after the quasi-argument *hit/it*; because there is little if any evidence of an overt true expletive and something else is checking the EPP in impersonal constructions, children would not allow an overt true expletive *it* to their grammar. During a stage of English following OE, when overt true expletive *it* increases in usage, children would be confronted with that stage's reflexes of the impersonal constructions. Although the child might still allow null true expletive *it* in their grammars by the lack of

evidence for an overt merged expletive element, a decrease in some of the OE properties that allow null expletives, including verb movement and case distinctions between nominative, genitive, and dative pronouns and full DPs, might make the null true expletive unproductive in these constructions. For instance, if nominative and dative pronouns or full DPs lost that distinction, then movement of the dative case to Spec, IP would be confused with movement of the nominative case to Spec, IP in regular constructions. In this situation, the recognition of DPs assigned theta role would not be as straightforward and would call for other means by which to differentiate between the two, for instance a more fixed word order, which would then require a new method of checking EPP. These factors would then lead to the emergence of the true expletive *it* that would become the rule.

In conclusion, the path of acquisition could be used to inform a theory of diachronic syntactic change, in this case the emergence of overt true expletives and the loss of null subjects. Since acquisition is key in the transmission of a language from one generation to another, as Pintzuk (2003) and Lightfoot (2003) argue, it is this stage that can very well be the point at which a language changes. These would be essential in explaining where true expletive *it* emerges from, if in fact it appears as an element that is merged in Spec, IP, where it was not needed previously. Since K&B show that the MnE speaking children acquire the true expletive *it* two to seven months after the thematic *it*, it is possible that children saw the connection between the referential thematic *it* and non-referential quasi-argument *hit/it* and postulated a third non-referential *it* which additionally lacked a theta role. If it is true, this parallel could be further evidence for a connection between child acquisition and syntactic change.

8 Conclusion

I began this thesis with the intention to appeal to two overarching questions. The first was to determine the extent to which OE had null subjects. I have found that OE had null thematic subjects, but their existence was restricted to instances where they could be assumed from the context. Quasi-argument *hit/it*, which I contend has a theta role like thematic subjects do, could also be null, but only rarely. The only widespread null subject in OE is the true expletive *it*, which was present in impersonal constructions. These facts require an analysis that takes into account the EPP and how it can be checked without overt subjects, if it is in fact strong in every language, as A&A maintain. In particular, the lack of an overt merged true expletive *it* in OE called for a deeper look into the method by which OE checked EPP, especially since its required presence in MnE was the initial motivation behind the original EPP requirement. After debating the merits and drawbacks of each method proposed by A&A as well as a comparison to the Finnish expletive *sitä* (Holmberg 2005), I concluded that EPP is checked by Move/Merge XP in OE, as it is in MnE.

I additionally posit that null true expletive *it*, which has no theta role and merges to Spec, IP in MnE to check EPP, is not represented by *pro* in Spec, IP in OE; instead, the EPP is checked by the movement of another DP, for instance a dative DP in the case of many impersonal constructions, to the Spec, IP position. The main reason for choosing Move/Merge XP over Move/Merge X° was the movement of the full dative DP to a preverbal position, which overwhelmingly also came before a full nominative DP. In a situation where a phrasal head would be taken to move to I°, it simply did not give ample motivation for a dative DP to move to Spec, IP while the verb moves to I° to check EPP, considering the many elements before it that

would occupy the Spec, CP position. However, I would like to continue to explore how modern languages check EPP to find a language or EPP checking method that more closely fits OE to explain some of the phenomena I found in OE, since OE did not entirely match any of the EPP descriptions or modern languages I investigated. Additionally, a later study would investigate just how widespread these types of examples I found are in OE, in particular through a more extensive corpus analysis of the period between OE and ME.

This analysis leads to the second question I posed, namely how a language can change from one that allows null subjects to one that does not. Many individual syntactic changes after the OE period could have led to the complete loss of null subjects with theta roles. For instance, the erosion of the case endings, particularly between nominative and dative pronouns, would yield confusion in the word order and theta role assignment. In the impersonal constructions, the role of experiencer is either given to a dative or nominative DP. The experiencer DP can appear either preverbally (52) or postverbally (50), depending on the verb's movement to either I° or C°, which are both possibilities in the older stages of English. However, my qualitative analysis of OE impersonal constructions could further benefit from a corpus study of the phenomenon to see the proportions of its different case configurations (a combination of nominative, dative, and genitive DPs), in particular between pronouns, full DPs, and clauses that are occasionally assigned theta roles in place of DPs.

I hope that this discussion has helped to further explore the possible link between cross-linguistic requirements, syntactic change, and child acquisition. I believe that we can draw upon much of the literature on acquisition to investigate how syntactic changes could have occurred between and across generations of speakers, something that both Lightfoot (2003) and Pintzuk (2003) refer to. Therefore, I hope that further exploration into the link between child acquisition

and syntactic change; further study into the topic of null subjects in both OE and MnE acquisition remains a promising way to explore this link.

Works Cited

- Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parametrizing AGR: Word Order, V-Movement and EPP-Checking. *Natural Language & Linguistic Inquiry* 16.491-539.
- . 1999. EPP without Spec, IP. *Specifiers: Minimalist Approaches*, ed. by D. Adger, B. Olunkett, G. Tsoulas & S. Pintzuk, 368. Oxford: Oxford University Press.
- Bailey, Charles James Nice. 1973. *Variation and linguistic theory [Arlington, Va.]: Center for Applied Linguistics*.
- Bates, E., V. Marchman, D. Thal, L. Fenson, P. Dale, S. Reznick, J. Reilly & J. Hartung. 1994. Development and stylistic variation in the composition of early vocabulary. *Journal of Child Language* 21.85-124.
- Carey, S. 1978. The child as word learner. *Linguistic theory and psychological reality*, ed. by M. Halle, J. Bresnan & G.A. Miller, 264-93. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Curzan, Anne. 2005. *December 12 Lecture: Changes currently underway in English*. History of the English Language: University of Michigan.
- Ellegård, Alvar. 1953. *The auxiliary do, the establishment and regulation of its use in English*. Stockholm,: Almqvist & Wiksell.
- Fischer, Olga, Ans van Kemenade, Willem Koopman & Win van der Wurff. 2000. *The syntax of early English*. Cambridge, U.K. ; New York: Cambridge University Press.
- Gentner, D. 1982. Why nouns are learned before verbs: Linguistic relativity versus natural partitioning. *Language development*, ed. by S.A. Kuczaj, 301-34. Hillsdale, N.J.: Erlbaum.
- Glenn, Jonathan A. 1982. *The Seafarer* (translation).
- Haegeman, Liliane M. V. 1994. *Introduction to government and binding theory*. Oxford, UK ; Cambridge, Mass., USA: B. Blackwell.
- Hogg, Richard. 1992. *The Cambridge History of the English Language* Cambridge: Cambridge University Press.
- Holmberg, Anders. 2005. Is There a Little Pro? Evidence from Finnish. *Linguistic Inquiry* 36.533-64.
- Jaeggli, Osvaldo & Kenneth J. Safir. 1989. The Null subject parameter and parametric theory. *The Null subject parameter*, ed. by O. Jaeggli & K.J. Safir, 320 p. Dordrecht ; Boston: Kluwer Academic Publishers.
- Kemenade, Ans van. 1987. *Syntactic case and morphological case in the history of English*. Dordrecht, Holland: Foris.

- Kirby, Susannah & Misha Becker. 2007. Which it is it? The acquisition of referential it. *Journal of Child Language* 34.571-99.
- Kjellmer, Goran. 2004. Some Trends in the Development of English or Whatever Happened to the Old English Strong Verbs? *Gothenberg Studies in English: Papers on Language and Literature*. Goteborg, Sweden: Minab/Gotab.
- Kroch, Anthony. 1989. Reflexes of grammar in patterns of language change. *Language variation and change* 199-244.
- . 1995. Morphosyntactic variation. Paper presented at the Chicago Linguistic Society. Regional Meeting, Chicago, Ill.
- Kroch, Anthony & Ann Taylor. 1997. Verb Movement in Old and Middle English: Dialect variation and language contact. *Parameters of morphosyntactic change*, ed. by A.v. Kemenade & N. Vincent, x, 544 p. Cambridge, U.K. ; New York: Cambridge University Press.
- Lightfoot, David. 1991. *How to set parameters : arguments from language change*. Cambridge, Mass.: MIT Press.
- . 1997. Shifting Triggers and Diachronic Reanalysis. *Parameters of morphosyntactic change*, ed. by A.v. Kemenade & N. Vincent, 253-72. Cambridge, U.K. ; New York: Cambridge University Press.
- . 1999. *The development of language: Acquisition, change, and evolution*. Malden, Mass.: Blackwell Publishers.
- . 2003. Grammatical Approaches to Syntactic Change. *The Handbook of Historical Linguistics*, ed. by B.D.J.a.R.D. Janda, 881. Malden, MA: Blackwell Pub.
- Manzini, M. Rita & Anna Roussou. 1999. A minimalist theory of A-movement and control. Paper presented at the UCL working papers in linguistics 11, London.
- Manzini, M. Rita & Leonardo Savoia. 2002. Parameters of subject inflection in Italian dialects. *Subjects, expletives, and the EPP*, ed. by P. Svenonius, 145-78. Oxford: Oxford University Press.
- OEME. 2004. Old English Dictionary.
- Pintzuk, Susan. 1996. Cliticization in Old English. *Approaching second: second position clitics and related phenomena*, ed. by A. Halpern & A.M. Zwicky, xxiii, 629 p. Stanford, Calif.: CSLI Publications.
- . 2003. Variationist Approaches to Syntactic Change. *The Handbook of Historical Linguistics*, ed. by B.D.J.a.R.D. Janda, 881. Malden, MA: Blackwell Pub.
- Platzack, Christer. 2003. Agreement and null subjects. Paper presented to the Nordlyd. *Tromso University Working Papers on Language and Linguistics* Vol. 31, No. 2: Proceedings of SCL 19, 2003.
- . 2004. Agreement and the person phrase hypothesis. *Working Papers in Scandinavian Syntax* 73.83-112.

- Roberts, Ian G. 1993. *Verbs and diachronic syntax : a comparative history of English and French*. Dordrecht [The Netherlands] ; Boston: Kluwer Academic Publishers.
- Santorini, Beatrice. 1992. Variation and change in Yiddish subordinate clause word order. *Natural Language & Linguistic Inquiry* 10.595-640.
- Schafer, Robin J. & Thomas Roeper. 2000. The Role of the Expletive in the Acquisition of a Discourse Anaphor. *Proceedings of the 24th Annual Boston University Conference on Language Development*, ed. by S.C. Howell, S.A. Fish & T. Keith-Lucas. Somerville, Mass.: Cascadilla Press.
- Tieken-Boon van Ostade, Ingrid. 1987. The auxiliary Do in eighteenth-Century English : a sociohistorical-linguistic approach: University of Leiden Thesis (doctoral).
- University of Michigan Humanities Text Initiative. & Oxford University Press. 1996. Oxford English dictionary. Ann Arbor, Mich.: University of Michigan Humanities Text Initiative.
- Visser, F. Th. 1970. *An historical syntax of the English language*. Leiden,: E.J. Brill.
- Warner, Anthony. 1997. The Structure of Parametric Change, and V-movement in the History of English. *Parameters of morphosyntactic change*, ed. by A.v. Kemenade & N. Vincent, 380-93. Cambridge, U.K. ; New York: Cambridge University Press.
- Williams, Alexander. 2000. Null Subjects in Middle English Existentials. *Diachronic syntax : models and mechanisms*, ed. by S. Pintzuk, G. Tsoulas & A. Warner, 164-87. Oxford ; New York: Oxford University Press.
- Yang, Charles D. 2000. *Internal and external forces in language change*. *Language variation and change* 12.231-50.