

Expletive *there* in West Germanic

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Introduction

The status of the subject position in German has been the source of some debate.¹ Some studies (Biberauer, 2004; Richards and Biberauer, 2005) have argued that Tense-final Germanic languages do not have an EPP requirement in the traditional sense. The absence of an expletive that occurs specifically in the subject position (as opposed to the topic position in Spec,CP) seems to support the argument that there is no traditional EPP in languages like German.

This paper will argue against such analyses. First, I will show that in historical stages of German, we see evidence of a subject expletive licensed specifically to fill Spec,TP. This expletive, *da* in Early New High German (ENHG), is merged specifically when the logical subject does not move to Spec,TP, leaving the position empty. This supports a traditional analysis of the EPP in German. Furthermore, I will show that the existence of expletive *da* lends support to the argument that two (non-topic) subject positions are available in the German clause structure (cf. Haeberli, 1999, 2000, 2005), which I take to be Spec,TP and Spec,*v*P (the base position of the subject).

In the second section of the paper, I will present a more speculative study of Old English (OE), which proposes that *þær* was available as an expletive before the Middle English period, when the use of presentational/existential *there* began to rise (Williams, 2000). In fact, this expletive occurs both in Tense-final and Tense-medial contexts in the OE period, although at a very low frequency. I will propose a link between the facts in ENHG and OE, based on which I argue that the traditional EPP is active in Tense-final Germanic languages.

1 The behavior of *da* in the history of German

The following section will discuss a corpus-based study² which provides new data on the behavior of *da* across the history of English. I will show that, while *da* is certainly not an expletive in Modern German, it was historically available as an expletive.

The following subsection will present the basic facts on the phenomenon in ENHG. Section 1.2 will compare the Modern German situation, and show that Modern German *da* cannot be analyzed as an expletive. Then, in Section 1.3 looks farther back in the history of German. Section 1.4, I show that there are similar phenomena across the Germanic language family, which may contribute to our understanding of the facts about *da*. Finally, Section 1.5 will propose an analysis of the facts throughout the history of German.

1.1 *Da* in Early New High German

The pronominal adverb *da* is generally locative, although it can also have a temporal interpretation, dependent on context. In both ENHG and contemporary German, *da* is also available as a complementizer. The following examples show ENHG *da* behaving as a locative (1) and temporal (2) adverb, and a complementizer (3). Like other demonstratives (such as the personal demonstrative pronouns *der*, *die*, and *das*), locative *da* may also be used as a relative pronoun in ENHG, alternating with the *wh*-word *wo* “where”.

- (1) Vnd es waren **da** viel weyber
and it was DA many women . . .
‘And there were many women there.’

(*Septembertestament*, Matthew 27:55)

- (2) **Da** berieff Herodes die weysen heymlich
DA appointed Herod the wise secretly
‘Then Herod secretly appointed the wise men.’

(*Septembertestament*, Matthew 2:7)

- (3) vnd **da** sie yhn sahen, fielen sie fur yhn nyder
and DA they him saw fell they before him down
‘And when they saw him, they fell down before him.’

(*Septembertestament*, Matthew 28:17)

All of these facts are essentially unchanged between ENHG and contemporary German. However, the ENHG element *da* differs in one significant respect: in subordinate clauses, it frequently occurs in the position of an extracted subject. The use of *da* in the following examples sounds archaic, and in fact distinctly biblical, to native speakers of contemporary German;

they are not part of the contemporary grammar.

- (4) Simon, der **do** heyst Petrus
Simon who DA is-called Peter
'Simon, who is called Peter'

(*Septembertestament*, Matthew 4:18)

- (5) Selig sind, die **da** geystlich arm sind
blessed are who DA spiritual poor are
'Blessed are those who are spiritually poor.'

(*Septembertestament*, Matthew 5:3)

In subordinate clauses, *da* is almost entirely restricted to clauses with gaps (Table N.1). Furthermore, only subject gap clauses show this effect; clauses with a gap left by a non-subject resemble clauses without a gap with respect to this phenomenon (Table N.2). In the subject gap examples where *da* appears, it is uniformly clause-initial. In contrast, the single example of *da* in a clause with a non-subject gap is not clause-initial (6). The behavior of *da* in subject gap clauses seems to suggest an entirely different phenomenon.

- (6) vnd wie viel korbe hubt yhr **da** auff?
and how many baskets lifted you DA up
'And how many baskets did you collect there?'

(*Septembertestament*, Matthew 16:9, 16:10)

Although *da* is available both as a complementizer and a relative pronoun in ENHG, as I discussed above, I will argue that the *da* correlated with subject gaps is neither. This *da* almost always occurs below an overt relative pronoun, making it clear that it cannot itself be a relative pronoun. In addition, when it is used as a relative pronoun (as discussed briefly

above), *da* has a locative interpretation, and corresponds to the extraction of a locative adjunct, not a subject. In addition, we can see that this *da* is not a complementizer because it can occur below the overt complementizer *das*:

- (7) Wer sagen die leutt, das **da** sey des menschen son?
who say the people that DA is of-the man son
‘Who do the people say is the son of man?’

(*Septembertestament*, Matthew 16:13)

1.2 Comparing Modern German *da*

In the previous subsection, I have shown that in ENHG, *da* frequently occurs in the position of an extracted subject. If it can be shown that *da* is an expletive in contemporary German, the data from ENHG will fit in as further evidence for a synchronic analysis of *da*. However, as I will demonstrate, *da* is not an expletive in standard German today. In normal usage, *da* may carry either a locative or temporal interpretation according to context, much like *there* in English (cf. Bayer and Suchsland, 1997; Koeneman and Neeleman, 2001; Kratzer, 2004; Richards and Biberauer, 2005). This ambiguity of interpretation often makes it difficult to identify whether *da* may be semantically null in a clause. Despite this, as I will show, *da* is not an expletive in Modern German.

Bayer and Suchsland (1997); Richards and Biberauer (2005) have proposed that *da* may in fact be used as a subject expletive in Spec,TP, which may be merged into the subject position when the logical subject remains low. (8a), shows that the proposed expletive *da* may appear if an adverb intervenes

between it and the logical subject, which must therefore (presumably) be low. If the logical subject appears to the left of the adverb, as in (8b), the sentence is argued to be ungrammatical, while (8c) shows that it is fine when *da* is omitted. Richards and Biberauer (2005) argue that this is evidence that *da* is an expletive that may fill a high subject position. They argue that because the EPP in German does not behave as it does in languages like English, filling this position is optional; but if the subject raises from its base position, the expletive should be disallowed.

- (8) a. daß (**da**) gestern ein Schiff versunken ist
 that (DA) yesterday a ship sunk is
 ‘... that a ship sunk yesterday.’
- b. * daß **da** ein Schiff gestern versunken ist
- c. daß ein Schiff gestern versunken ist

(Richards and Biberauer, 2005)

This argument must ultimately be rejected, for contemporary German at least; and in fact, Biberauer (2010) reaches the conclusion that *da* is not an expletive, *contra* to the earlier analysis in Richards and Biberauer (2005). Native German speakers easily accept the sentence in (8b), contrary to the judgments in Richards and Biberauer (2005). Furthermore, sentences such as these are not possible without a locative (or temporal) interpretation for *da*. When paired with another locative, the sentence generally gains a redundant reading, or where possible, a reading in which two locations are referenced (as in 10). This suggests that *da* cannot be semantically null in

contemporary German, and thus is not an expletive.

- (9) a. ?Ich glaube, daß **da** auf der Party getanzt wurde.
I believe that DA at the party danced became
'I believe that there was dancing there, at the
party.'
- b. ?? Ich glaube, daß auf der Party **da** getanzt wurde.
- (10) Ich glaube, daß **da** in China angerufen wurde.
I believe that DA in China up-called became.
'I believe that someone in China was called (from
there).'

Furthermore, the structural position of *da* does not fit the expletive analysis. In German, weak pronouns are necessarily high in the structure. Subject pronouns are grammatical in sentences with *da*, but obligatorily precede it. The same is true of object pronouns.

- (11) a. *Ich glaube, daß **da** er ihn gegessen hat.
I believe that DA he it eaten has
'I believe that he ate it there.'
- b. *Ich glaube, daß er **da** ihn gegessen hat.
- c. Ich glaube, daß er ihn **da** gegessen hat.

The position of *da* thus does not match with the claim that it occupies Spec,TP. What we see instead is that in Standard German, *da* is weak, and behaves much like weak pronouns in German. As a result, it prefers a position at the left periphery of the clause, often string-adjacent to the material in C.

However, it must appear after all pronominal arguments. Weak elements in German follow an ordering hierarchy: weak adverbs like *da*, for example, must be lower than a weak object pronoun

(cf. Lenerz, 1977). The fact that *da* tends to appear at the left periphery is completely expected, simply because it is weak.

An alternative analysis of *da* has been proposed by Kratzer in the literature on situational semantics, which captures the ambiguous interpretations associated with the element. She suggests that *da* may be considered a *situation pronoun*, an adverbial pro-form which may be used to refer to any salient information in the context situation.

(12) Was riecht denn **da** so komisch?
what smells PART DA so funny
'What's the strange smell here?'

(13) **Da** brandelt was.
DA burns something
'Something is burning.' (Kratzer, 2004)

As I have noted before, non-subject gap *da* in ENHG has the same general properties as *da* in Modern German, including an ambiguous and context-dependent interpretation. I will therefore assume that the general usage of *da*, both in ENHG and in Modern German, falls under Kratzer's analysis (excluding, of course, its use as a complementizer or relative pronoun). However, as it stands, this analysis offers no further insight into the particular correlation between *da* and subject gaps. Instead, in the next section, I will show that the necessary evidence can be found farther in the past.

1.3 The historical origins of expletive *da*

Regular sound change led to the collapse of two OHG adverbs, *thō* ("then") and *thār* ("there"), into a single adverb *da*. This

led to the elements ambiguous interpretation (cf. Axel, 2007), allowing it to develop into a situation pronoun by the modern period. Only the behavior of OHG *thār* offers insight into the curious behavior of subject gap *da* in ENHG. In fact, *thār* shows a correlation with subject gaps, just like *da* in ENHG.

It is simpler to diagnose *thār* as an expletive than *da*, because it does not have the semantic ambiguity we have seen in ENHG (having not yet merged with the temporal adverb *thō*). If *thār* does not have a possible locative interpretation in a given clause, it can be assumed to be semantically null. In order to explore the behavior of *thār* in these cases, I considered a small sample from the OHG *Tatian* text. This sample included 56 relative clauses, 41 of which had a subject gap. As predicted, many of the subject gap examples included an instance of *thār*, with no possible locative interpretation.

(14) bithiu uuanta mir teta mihhilu thie **thār** mahtīg ist
 because since to.me does much that DA mighty is
 ‘Because the Mighty One did great things for me’

(Luke 1:49)

(15) Thie **thār** habē orun thie hōre.
 that DA have ears that hear
 ‘He that has ears to hear, let him hear.’

(Matthew 13:43)

As in ENHG, *thār* occurs almost exclusively in the position of an extracted subject. Although the sample size is too small to say with complete confidence, this data allows a tentative estimate that *thār* occurred in subject gaps about 50% of the time in OHG (Table N.3). I also compared the subject

relatives in this sample to 35 parallel clauses from the *Septembertestament* which were also translated as a subject relative (Table N.4). The frequency of *da/thār* has significantly decreased between the two time periods (chi-square = 5.29, $p = 0.021$). This suggests that the use of the subject expletive has already begun to decline by the ENHG period.

According to this preliminary study of OHG, we can establish the following stages: in OHG, *thār* was available as an expletive, to optionally fill Spec,TP when the subject is extracted. In ENHG, *da* shows the same property, although its status as an expletive is obscured by the semantic underspecification of the situation pronoun *da*. In Standard German, *da* is no longer available as an expletive.

1.4 Subject gaps and expletives in Germanic

This phenomenon is not wholly unique cross-linguistically. Several languages in the Germanic family have constructions in which subject gaps left by extracted subjects are filled by expletive elements. In order to provide a context for the puzzle at hand, I will review two such cases. A better understanding of the mechanisms underlying these phenomena may help explain the behavior of *da* in ENHG.

1.4.1 Danish *der*

In Danish, the element *der* appears clause-initially in relative clauses and indirect questions with a subject gap (cf. Jacobsen and Jensen, 1982; Erteschik-Shir, 1984; Vikner, 1991;

Mikkelsen, 2002). The following examples demonstrate that *der* is grammatical in an indirect question where the subject has been extracted, but not permitted in a similar example if the object has been extracted instead.

(16) Jeg ved ikke hvem **der** kan li' ham.
 I know not who DER likes him
 'I don't know who likes him.'

(17) *Jeg ved ikke hvem **der** han kan li'.
 I know not who DER he likes
 'I don't know who he likes.'

(Erteschik-Shir, 1984)

The literature is divided on whether this element is the subject expletive *der* “there” occupying the gap (Erteschik-Shir, 1984; Mikkelsen, 2002), or a homophonous element in C (Jacobsen and Jensen, 1982; Vikner, 1991).

There are two obvious reasons to position *der* in the subject gap (Spec,TP). The first is that *der* does not appear in clauses with a non-subject gap. The second is that *der* is independently attested as a subject expletive in Danish, so it is clearly available to occupy Spec,TP.

Mikkelsen (2002) shows that the distribution of *der* supports this analysis. It is marked, but acceptable, for *der* to occur with the complementizer *at* and the element *som*, which Mikkelsen analyzes as an invariant operator (like OP) in Spec,CP. Whenever any of these elements co-occur, they must be in the order *som at der*, requiring *der* to appear below the complementizer. The analysis of *der* as a C-element requires CP-recursion to account for this structure, while idiosyncratic

properties of each head must explain the ordering restriction. However, the assumption that *der* is in Spec,TP predicts exactly this distribution.

Vikner (1991) suggests some problems with this analysis which must be addressed. There is usually a transitivity restriction on the appearance of expletive *der*, as well as a restriction on the definiteness of the logical subject. When *der* appears in the subject gap position, neither restriction holds.

- (18) a. vi kender de lingvister **der** vil læse denne bog
we know the linguists DER will read this book
'We know the linguists who will read this book.'

(Vikner, 1991)

Because German (unlike Danish) does have transitive expletive constructions, a discussion of the first issue is beyond the scope of this paper. I will focus instead on the definiteness problem. In response to Vikner's point, Mikkelsen proposes that the gap in relative clauses behaves like an indefinite, even when its antecedent is not. This has been previously argued, particularly for English (cf. Browning, 1987; Bianchi, 1999), based on examples like the following:

- (19) a. * There were the men in the garden
b. The men that there were in the garden were all diplomats

(Browning, 1987)

Mikkelsen relates this to the argument, made in Reinhart (1987), that relative *wh*-words in English are inherently indefinite. Mikkelsen suggests that the evidence provided by

der motivates us to extend this analysis to Danish, to explain why the relative pronouns seem to be patterning as indefinites.

1.4.2 Yiddish subject gaps

Yiddish is a symmetric V2 language: verb-second orders are required both in matrix and subordinate clauses. If neither the subject nor any other constituent is raised to the topic position, the expletive element *es* appears instead. This expletive also appears in subject gap position, when the subject is extracted from a free relative or indirect question (cf. Diesing, 1990, 1997; Prince, 1993, 1989). However, this does not take place in ordinary relative clauses.

- (20) a. Ikh veys nit ver **es** iz gekumen
I know not who ES is come
'I don't know who came.'
- b. *Ikh veys nit ver iz gekumen
- c. Ikh veys nit vos Max hot gegesn
I know not what Max has eaten
'I don't know what Max ate.'
- d. *Ikh veys nit vos Max hot **es** gegesn

(Diesing, 1990)

- (21) a. Der melamed vos iz besser far ir iz beser far
the teacher that is better for her is better for
mir.
me
'The teacher that is better for her, is better for me.'
- b. *Der melamed vos **es** iz beser far ir iz beser far mir.

(Prince, 1989)

Free relatives and indirect questions seem to have a special status here. Prince (1989) argues that the relevant characteristic of these clause types is that the extracted element represents brand-new information in the discourse, unlike relative clauses, which have a clear referent. Using a small corpus of narrative Yiddish, Prince demonstrates that subject postposition in Yiddish is more frequent with brand-new subjects. In indirect questions and free relatives, the extracted element is pragmatically treated as brand-new, because it is not related to any elements already present in the discourse. As a result, they are extracted from the postposed position. The insertion of the expletive *es* in these cases is required because there is no subject trace in the topic position, and the expletive is licensed to fill the gap.

This case is somewhat different from ENHG *da*. Unlike *es* in Yiddish, *da* is attested in ordinary relative clauses. In addition, because Yiddish is a symmetric V2 language, we know that there is a requirement to fill the topic position in subordinate clauses. In German, subordinate clauses are not V2. However, we may ask whether there is a subject position which must be filled in German subordinate clauses. The present study proves relevant to this question.

1.5 Analyzing *da* in Early New High German

From OHG until the present day, *da* patterns as a weak adverb, preferring a position in the left periphery of the verbal domain. In addition, while *da* is never used as a subject

expletive in Standard German today, its OHG cognate *thār* “there” did have this function. I have shown that ENHG can be taken as the middle stage in between these two systems: ENHG shows frequent use of the situation pronoun *da*, but also some evidence of a subject expletive *da* inherited from OHG.

Because of the ambiguous interpretation of the situation pronoun, I have shown that it is often impossible to distinguish semantically null cases of *da* from cases that are behaving as referential pro-forms for a less obvious situational context. However, the examples of *da* in subject gap position may occur in non-narrative and even “timeless” contexts, in which there is literally no salient situation for it to refer to. When supported by the OHG evidence, this becomes clear evidence that subject gap *da* has the properties of a true expletive.

(22) Jhesu Christi, der **do** ist ein son Dauids des sons
 Jesus Christ who DA is a son of-David the son
 Abraham.
 of-Abraham
 ‘Jesus Christ, who is a son of David, Abraham’s son.’

(*Septembertestament*, Matthew 1:1)

(23) Selig sind, die **da** geystlich arm sind
 blessed are who DA spiritual poor are
 ‘Blessed are those who are spiritually poor.’

(*Septembertestament*, Matthew 5:3)

As Prince (1989) argued for Yiddish, I will propose that *da* occurs in Spec,TP when the subject is extracted from a position lower in the clause. However, unlike Yiddish, the appearance of *da* in subject gaps is optional (the evidence from OHG, in which the expletive occurs in roughly 50% of the

subject gap clauses, supports such an assumption). My analysis of the ENHG expletive must hinge on a mechanism which allows subjects to optionally remain low.

Haerberli (1999, 2000, 2005) discusses two subject positions in the Germanic language family. Weak subject pronouns are restricted to the high position, as we have discussed above; full DP subjects, meanwhile, may optionally remain low. I follow Wallenberg (2009) in assuming these positions to be Spec,TP and the base position of the subject in Spec,vP. Wallenberg also notes that the low subject position in German is related to the “definiteness effect” discussed by Diesing (1992). Definite DPs, Diesing observes, prefer a high position; only indefinite subjects may (optionally) remain low.

I argue that in historical Germanic, expletive *da* is licensed when the subject is extracted from its base position in Spec,vP without first raising through Spec,TP. As Mikkelsen (2002) claims for *der* in Danish (Section 1.4.1), there is reason to believe that the gaps in subject relatives are inherently indefinite, regardless of the characteristics of their antecedents. Therefore, I argue that the subject of a relative clause behaves like an indefinite DP in German as well, and may optionally remain low (before extraction). In these cases, *da* is inserted to fill the empty position in Spec,TP.

This argument has the following consequences. First, the expletive *da* provides evidence that there is an EPP feature on T in German. When the extracted subject does not leave a trace in Spec,TP, the expletive is licensed to satisfy the EPP in

its place. The evidence indicates that this feature changed at some point between OHG and contemporary German. This suggests that a null expletive became available to fill Spec,TP, and eventually replaced *da* in this function. As a result, *da* lost its expletive function, and behaves only as a situation pronoun in the modern language.

Second, the presence of *da* becomes support for the claim that there are two subject positions in German: the expletive may only occupy Spec,TP if the extracted subject can be licensed in a low position. Otherwise, we expect the subject trace to fill Spec,TP. We cannot easily motivate an analysis in which *da* is a pronounced version of the subject trace, because subject gap *da* is optional. By relating expletive *da* to the low subject position in German, we account for its optionality: indefinite subjects may be extracted without passing through Spec,TP. In this case, an expletive is licensed to fill the empty position. The subject may also move to Spec,TP, making the insertion of *da* unnecessary and impossible.

2 An expletive in Old English

The second part of this paper is a speculative exploration of OE. A corpus-based study³ suggests that the ENHG phenomenon of *da* has a parallel in the history of English in *þær* (“there”). I will motivate this claim in the next subsection. Then, in Section 2.2, I will briefly outline the behavior of *þær* across the OE period, and its loss by the beginning of Middle English. In Section 2.3, I will provide an analysis for the

existence and loss of “subject gap” *þær*.

2.1 Old English subject gaps and *þær*

OE *þær* shows the same pattern as ENHG *da* in subject gap clauses, but at a much lower frequency. The overall frequency of *þær*, although low, is significantly higher in clauses with a subject gap than in other subordinate clauses (Table N.5). *þær* also occurs at a higher frequency in subject gap clauses than in clauses with a non-subject gap (Table N.6); just as in ENHG, clauses with a non-subject gap pattern more like clauses without a gap with respect to the distribution of *þær*.

In subordinate clauses, we can find examples of *þær* which cannot have a locative interpretation. In (24), the relative clause discusses days of the calendar, and thus entities which are independent of any location. In (25), meanwhile, there is a full locative phrase (*to þam scypum*), which would make the occurrence of a locative demonstrative redundant.

- (24) Pa fif dagas þe þær synd betwux VI kalendas and
the five days that there are between VI kalendas and
kalendas Martii
kalendas Martii
‘The five days that are between VI kalendas and kalendas
Martii’

(ByrM_1_[Baker-Lapidge]:2.1.77.635)

- (25) þa ane þe ðær ut ætswymman mihton to þam
the one who there out swim might to the
scypum.
ship
‘The one who could swim out to the ship.’

(ChronC_[Rositzke]:915.1.18.1096)

We have seen that the overall frequency of *þær* suggests that it has a different function in subject gap clauses. Its position in the clause further supports the claim that it is behaving as an expletive: *þær* occurs clause-initially at a much higher frequency in subject gap clauses (Table N.7). However, there are two possible interpretations of this fact. Either *þær* is occupying the subject gap in these clauses, or alternatively, *þær* is frequently adjacent to the subject, and as a result it frequently appears to be clause-initial when the subject is extracted. We must therefore ask the question: does *þær* occur clause-initially in subject gap clauses at the same frequency as it occurs adjacent to an overt subject? If this were the case, we would be forced to conclude that *þær* is not in the subject gap, but next to it.

To answer this question, I compared the frequency of “subject gap” *þær* to the frequency at which *þær* appears adjacent to an overt clause-initial subject in subordinate clauses. I found that the frequency of subject gap *þær* does not match the “subject-adjacent” pattern. (Table N.8). Furthermore, other light adverbs do not share this pattern; the frequency at which other light adverbs occur clause-initially in subject gap clauses is essentially the same as the frequency at which they appear adjacent to an overt subject (Table N.9). This supports the conclusion that at least some of the occurrences of *þær* in subject gap clauses are not simply adjacent to the gap.

2.2 A change in the distribution of expletive *þær*

The behavior of *þær* is apparent in both Tense-final and Tense-medial clauses. This can be shown by considering frequencies of initial *þær* in clauses with a finite auxiliary and a non-finite verb. In clauses with the auxiliary-verb (roughly representing an underlying Tense-medial order, minus some examples of Verb (Projection) Raising), subject gap *þær* occurs at a much higher rate than subject-adjacent *þær*: in subject gap clauses with this configuration, *þær* occurs clause-initially 76.9% of the time, and in other clauses it occurs adjacent to the initial subject 41.1% of the time. The difference is visibly and statistically significant (chi-square = 8.4634, $p = 0.0036$). In clauses with the verb-auxiliary order (representing an underlying Tense-final order), the rate of subject-adjacent *þær* rises (80.9%), but the rate of subject gap *þær* is still significantly higher (93.5%; chi-square = 5.0505, $p = 0.0246$). Therefore, the occurrence of “subject gap” *þær* does not seem to be unique to either the older Tense-final grammar of OE, or the newer Tense-medial grammar.

The frequency at which *þær* occurs clause-initially in subject gap clauses is relatively stable across the OE period (Table N.10). However, the overall frequency at which “subject gap” *þær* declines slightly (Table N.11). By the Middle English period, *þær* behaves like other light adverbs in clauses with a subject gap (Table N.12): *þær* and other light adverbs now occur clause-initially at roughly the same frequency.

What causes the disappearance of subject gap *þær*, just as existential *there* begins to rise in Early Middle English (cf. Williams, 2000), is unclear. I will offer some thoughts on this in the next section.

2.3 Analyzing Old English *þær*

I have shown that there is a very small sample of *þær* in OE which matches the pattern of subject gap *da* in German. This suggests, *contra* Breivik (1991); Ingham (2001), that *þær* was not simply a “dummy topic” in OE/early Middle English before it was established as an existential expletive. In subject gap clauses, *þær* seems to be used to fill Spec,TP. However, the occurrence of *þær* in subject gaps seems to disappear just before modern expletive *there* began to establish itself in the language.

English clearly did not replace expletive *þær* with a null expletive in any context, including in the context of subject extraction. Recall, for example, the sentence from Browning (1987):

- (26) a. The men that **there** were in the garden were all diplomats.

In existential/presentational contexts, the subject may still be extracted from a low position, and an overt expletive is licensed to fill the gap. Therefore, unlike German, English has retained the ability to fill a subject gap with overt *there*. I therefore suggest it is not the expletive which occurs at such a low frequency in these clauses, but the gap.

Two facts about OE may contribute to this possibility: First, a great deal of literature has discussed the two subject positions in OE (cf. Haeberli, 2001; Speyer, 2008; Wallenberg, 2009), which I assume to be Spec,TP and Spec,vP. The high position is obligatory for pronominal subjects, while full DP subjects may remain in the lower position. However, Haeberli (2001) notes an overwhelming preference for all subjects (pronominal and full DP) to appear before the tensed verb in subordinate clauses, which may be evidence that subjects predominantly target Spec,TP in this context.

The YCOE corpus supports this claim. Of the total sample of complement *that*-clauses in OE, I find that subjects remain postverbal at a rate of roughly 3.8%. If this is also the case in clauses with an extracted subject, it may cause the overwhelming majority of subjects to move to Spec,TP before extraction. This offers an explanation for the low rate of subject gap *þær* in OE.

In addition, the low subject position is lost as a general option for full DPs (cf. Speyer, 2008). The loss of this position further restricted the contexts in which subjects could be extracted from Spec,vP. This would lead finally to the current situation, in which Spec,TP remains unfilled by the subject only in some existential and presentational contexts, therefore effectively causing the disappearance of “subject gap” *there*.

3 Conclusion

I have presented quantitative evidence that both historical German and Old English used an expletive to fill Spec,TP in subordinate clauses with a subject gap. This contradicts previous arguments that these languages do not have expletives in Spec,TP, and also suggests that the EPP is active in Tense-final Germanic languages. The apparently optional occurrence of this expletive suggests that in both German and Old English, the subject may be extracted from a low subject position (which I take to be Spec,*v*P), but that extraction after the subject has moved through Spec,TP is also possible.

I propose that the loss of this phenomenon occurred in each language for different reasons. In German, the semantically underspecified nature of adverbial *da* contributed to its reanalysis as an adverb in all contexts, and its expletive function came to be filled by a null expletive. In English, the subject simply lost the option of extracting from Spec,*v*P in the majority of contexts (although I have shown that in presentational/existential subordinate clauses, extraction from a low position still licenses expletive *there*, as expected).

Finally, this study stands as a demonstration of the importance of parsed corpora to empirical syntactic research. By using tools such as these, we come to understand synchronic facts of a language in ways that are not evident when viewed in isolation. In fact, the phenomenon I have explored in Old English occurs at such a low frequency that

without access to quantitative data of a corpus consisting of 1.5 million words, it would not even be observable. Building and using corpora such as those central to this paper must be treated as a central concern in the continuing development of the field, both for diachronic and synchronic work.

Table N.1. Distribution of *da* in subordinate clauses.

	<i>da</i>	No <i>da</i>	Total
Clauses with gaps	77	422	499
All other subordinate	2	1146	1148
Total	79	1568	1647

Table N.2. Distribution of *da* in clauses with gaps.

	<i>da</i>	No <i>da</i>	Total
Subject gap	76	326	402
Non-subject gap	1	96	97
Total	77	421	499

Table N.3. OHG *thār* in clauses with gaps.

	<i>thār</i>	No <i>thār</i>	Total
Subject gap	21	20	41
Non-subject gap	1	14	15
Total	22	34	56

Table N.4. The subject expletive in OHG and ENHG.

	<i>da/thār</i>	No <i>da/thār</i>	Total
OHG	21	20	41
ENHG	8	27	35
Total	29	47	76

Table N.5. Distribution of *þær* in subordinate clauses.

	Subject gap	Other subordinate
<i>þær</i>	515	1055
No <i>þær</i>	18014	79217
% <i>þær</i>	2.8%	1.3%
chi-square = 205.7137, $p \approx 0$		

Table N.6. Distribution of *þær* in clauses with gaps.

	Subject gap	Non-subject gap
<i>þær</i>	515	186
No <i>þær</i>	18014	17074
% <i>þær</i>	2.8%	1.1%
chi-square = 133.8805, $p \approx 0$		

Table N.7. Position of *þær* in subordinate clauses.

	Subject gap	Non-subj. gap	No gap
Initial <i>þær</i>	472	38	348
Non-initial <i>þær</i>	43	148	521
% Initial	91.7%	44.2%	40.0%

Table N.8. Clause-initial and subject-adjacent *þær*.

	Subject gap	Other subordinate
Initial/adjacent <i>þær</i>	472	389
Non-initial/adjacent <i>þær</i>	43	200
% initial/adjacent	91.7%	66.0%

Table N.9. Clause-initial and subject-adjacent adverbs.

	Subject gap	Other subordinate
Initial/adjacent adv.	1614	6906
Non-initial/adjacent adv.	1595	4974
% initial/adjacent	50.3%	58.1%

Table N.10. Distribution of *þær* across the OE period.

	Pre-950	Post-950
Initial	82	141
Non-initial	7	5
% initial	92.1%	96.6%
chi-square = 1.427, $p = 0.2323$		

Table N.11. Frequency of initial *þær* across the OE period.

	Pre-950	Post-950
Initial <i>þær</i>	82	141
No (initial) <i>þær</i>	3465	7882
% initial	2.3%	1.8%
chi-square = 3.711, $p = 0.05406$		

Table N.12. *þær* and other light adverbs in Middle English.

	<i>þær</i>	Other light adverb
Initial	48	794
Non-initial	95	1226
% initial	33.6%	39.3%
chi-square = 1.6175, $p = 0.2$		

Notes

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²The corpus data used for ENHG was taken from a parsed corpus of Martin Luther's *Septembertestament*. At the time of this study, a corpus of roughly 50,000 words was available. More information can be found at <http://enhgcorpus.wikispaces.com>.

³Data for this study is from the York-Toronto-Helsinki Parsed Corpus of Old English Prose (Taylor et al., 2003) and the Penn Parsed Corpus of Middle English (Kroch and Taylor, 2000).

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