

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 For example, 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 in the subject position (as opposed to Spec,CP) seems to support the argument that Spec,TP has no special status 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 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, the existence of expletive *da* lends support to the argument that two (non-topic) subject positions are available in the German clause structure (cf. Haerberli, 1999, 2000, 2005).

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). 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

This paper presents a corpus-based study, providing new data on the behavior of *da* across the history of German. The corpus data used for ENHG was taken from a parsed corpus of Martin Luther's first translation of the New Testament, the *Septembertestament*, published 1522. The corpus consists of roughly 100,000 words of fully annotated and hand-corrected text (Light, 2011). The data will demonstrate 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 ENHG data to Modern German, and show that Modern German *da* cannot be analyzed as an expletive. In Section 1.3, I look farther back in the history of German. Section 1.4 shows 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

As an adverbial pro-form, *da* generally carries a locative interpretation (1), but given the correct context, it can also be temporal, as in (2). *Da* can also be used as a complementizer (3). Like other demonstrative pro-forms (such as the personal demonstrative pronouns *der*, *die*, and *das*), locative *da* may be used as a relative pronoun, 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)

The above facts are essentially constant through ENHG and contemporary German. However, the ENHG element *da* differs in one significant respect. In subordinate clauses, *da* frequently occurs in the position of an extracted subject. The use of *da* in examples like the following sounds archaic, and in fact distinctly biblical, to native speakers of contemporary German.

- (4) Simon, der **do**² heyst Petrus
Simon who DA is-called Peter
‘Simon, who is called Peter’
(*Septembertestament*, Matthew 4:18)

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 behave like 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, of the six examples of *da* in a clause with a non-subject gap, five are *not* clause-initial (5). The behavior of *da* in subject gap clauses seems to suggest an entirely different phenomenon.

- (5) 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, I will argue that the *da* associated 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 *da* is used as a relative pronoun, *da* has a locative interpretation, and corresponds to the extraction of a locative adjunct, not a subject. We can also see that the subject-gap *da* is not a complementizer because it can occur below the overt complementizer *das*:

- (6) 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)

All of these facts suggest that the *da* which appears in subordinate clauses with a subject gap must be performing a different function. I will argue that it is a subject expletive.

1.2 Comparing Modern German *da*

We have seen that in ENHG, *da* frequently occurs in the position of an extracted subject. 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, as an expletive would be,

in a given context. 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 in modern German. They argue that *da* may be merged into the subject position when the logical subject remains low.

- (7) 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. Although Richards and Biberauer (2005) does not explicitly discuss the intended interpretation of *da* in (7b), it may be that the given sentence is argued to be ungrammatical only when *da* does not carry a locative interpretation. In fact, native German speakers easily accept the sentence in (7b), but *only* with 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 9). This suggests that *da* cannot be semantically null in contemporary German, and thus is not an expletive.

- (8) ? 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.'
(9) 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.

- (10) 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 under this analysis, although it is not an expletive.

An alternative analysis of *da* has been proposed by Kratzer (2004) in the framework of 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.

- (11) Was riecht denn **da** so komisch?
 what smells PART DA so funny
 ‘What’s the strange smell here?’
- (12) **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. 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 element’s 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 text, written in the 9th century, is a translation of the Latin translation of a text originally attributed to a second-century author. It is similar in style to the *Septembertestament*, being a synthesis of the four Gospels.

The sample of the *Tatian* used for this study 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.

- (13) 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)
- (14) 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 the subject position 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, as one might expect, is not unique cross-linguistically. In this section, I will consider two languages in the Germanic family in which subject gaps left by extracted subjects may be filled by expletive elements. This will provide context for the puzzle at hand. 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). *Der* is grammatical in an indirect question where the subject has been extracted, as in (15), but not permitted if the object has been extracted instead (16).

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

(16) *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)

It is important to note that *der* ("there") is independently attested as a subject expletive in Danish, such as in matrix clauses. Two conflicting analyses have been proposed to account for the behaviour of *der*. Erteschik-Shir (1984); Mikkelsen (2002) propose that the *der* which occurs in clauses with a subject gap is indeed the subject expletive *der*, occupying the gap. Jacobsen and Jensen (1982); Vikner (1991), in contrast, argue that it is a homophonous element in C. There are two obvious reasons to position *der* in the subject gap (Spec,TP). The first is, of course, that it is independently attested as a subject expletive. The second is that *der* does not appear in clauses with a non-subject gap.

Mikkelsen (2002) shows that the distribution of *der* in subordinate clauses with a subject gap supports the subject expletive 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, and idiosyncratic properties of each head must explain the ordering restriction. However, the assumption that *der* is in Spec,TP predicts exactly this distribution.

- (17) a. ?Vi kender de lingvister **som at der** vil læse
 we know the linguists SOM that DER will read
 denne bog.
 this book
 ‘We know the linguists who will read this book.’
 (Vikner, 1991)
- b. *Vi kender de lingvister **at der som** vil læse denne
 bog
- c. *Vi kender de lingvister **at som der** vil læse denne
 bog
- d. *Vi kender de lingvister **der som at** vil læse denne
 bog
- e. *Vi kender de lingvister **der at som** vil læse denne
 bog
 (Mikkelsen, 2002)

Vikner (1991) suggests some problems with this analysis which must be addressed. There is usually a transitivity restriction on the appearance of expletive *der*: it can generally only occur with intransitive clauses. There is also a restriction on the definiteness of the logical subject, which usually must be indefinite. 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 not relevant for our current concerns. I will focus instead on the definiteness problem. In response to this point, Mikkelsen (2002) 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.³
(Browning, 1987)

Mikkelsen relates this to the argument, made in Reinhart (1987), that relative *wh*-words in English are inherently indefinite. She suggests that the evidence provided by *der* motivates us to extend this analysis to Danish, to explain why the gaps in relative clauses 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 mir
the teacher REL is better for her is better for 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 have a special status here. Prince (1989) argues that the relevant characteristic of these clause types is that the extracted element in a free relative or indirect question represents brand-new information in the discourse, unlike the extracted element relative clauses, which has a clear referent.

Prince associates this with the pragmatic properties of subject postposition. Using a small corpus of narrative Yiddish, Prince demonstrates that subject postposition in

Yiddish is more frequent with brand-new subjects, suggesting that discourse status is one potential motivation for subject postposition.

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. Prince therefore suggests that, prior to extraction, the subjects of indirect questions and free relatives were postposed. As a result, these subjects have been extracted from the postposed position. The insertion of the expletive *es* is then required because there is no subject trace in the topic position, and the expletive is licensed to fill the gap.

The Yiddish case is somewhat different than 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 preverbal 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.

1.5 Analyzing *da* in historical German

Thus far, we have established the following facts. From OHG until the present day, *da* may function as a weak adverb, generally occurring in 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* did have this function. ENHG can be taken as the middle stage in between these two systems.

Because of the ambiguous interpretation of the situation pronoun, 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 *da* to refer to, as in (22)–(23).

- (22) Jhesu Christi, der **do** ist ein son Davids 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)

Just as Prince (1989) argued for Yiddish, I 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,*v*P.⁴ 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 (here assumed to be Spec,TP); only indefinite subjects may (optionally) remain low (here assumed to be Spec,*v*P).

I argue that in historical Germanic, expletive *da* is licensed to fill the higher subject position, Spec,TP, when it is empty. The expletive occurs in subject gap clauses when the subject is extracted from its base position in Spec,*v*P 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.

A demonstration can be observed in the comparison of Figures N.1 and N.2, which show simplified trees of the relative clause in (23). The subject may have been extracted directly from the low subject position (Spec,*v*P), as in Figure N.1. In this case, the expletive fills the gap. Figure N.2 shows a derivation in which the subject passes through Spec,TP before being extracted, leaving a trace; in this case, the expletive is not licensed, and *da* would not appear.

However, the subject expletive was not restricted to these contexts. The current study has focused on subordinate clauses with subject gaps entirely because they are the case in

which this phenomenon is most easily observed. In matrix clauses, it is more difficult to observe the subject expletive *da* because it becomes nearly impossible to distinguish between it and the situation pronoun. We do find existential-like examples with matrix clause *da*; an example is given in (24). Note that there is no locative or temporal adverb in the corresponding verse in either Greek or Latin. However, it is generally impossible to distinguish between the situation pronoun and the expletive in such cases.

- (24) a. Vnnd **da** war eyn weyb, das hatte den bluttgang
 and DA was a woman that had the hemorrhage
 zwelff iar gehabt ...
 twelve years had
(*Septembertestament*)
- b. Kai gunE tis ousa en rusei haimatos etE
 and woman any being in gushing of-blood years
 dOdeka ...
 twelve
(Greek, *Scriveners Textus Receptus*, 1894)
- c. Et mulier, quæ erat in profluvio sanguinis annis
 and woman which was in issue blood years
 duodecim ...
 twelve
(Latin, *Clementine Latin Vulgate*)
 ‘And (there was) a woman who had had a hemorrhage
 for twelve years ...’
 (Mark 5:25)

My claim is that, while the majority of these cases are examples with the situation pronoun, some of these examples do indeed involve *da* behaving as a subject expletive.

My analysis has two major 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. In the next section, I will argue that a null expletive was also available to fill Spec,TP as early as OHG, and that it eventually replaced *da* in this function.

Second, the presence of *da* becomes support for the claim that there are two subject positions in German: the expletive may only occupy the high position 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, but the subject may also move to Spec,TP, in which case expletive *da* is not licensed.

Crucially, although the element *da* was available as a subject expletive in historical German, it has lost this function in the modern language. There are two ways of analyzing the loss of expletive *da*: either it was replaced by a null expletive, or German has lost an EPP requirement, and the high subject position may now remain unfilled in these cases.

In fact, Abraham (1991) gives evidence that a null expletive was available in OHG and Middle High German (MHG). For example, in a clause with an extraposed subject, an expletive may not occur (25a), although the Modern German equivalent would contain the expletive *es* (25b). Abraham argues that this null expletive was ultimately overtaken by the expletive *es* and lost.

- (25) a. uuár ist, dhaz ...
 true is that
 (Is.(H) 24,5)
- b. Wahr ist **es**, dass ...
 true is it that
 ‘It is true, that ...’
 (Abraham, 1991)

It is worth noting that among Abraham’s examples, demonstrating cases with a null expletive in OHG and MHG, are examples containing the historical source of *da*, *thār* (or orthographic variants thereof). This may be further evidence of expletive *da* in OHG.

- (26) **dar** dunchet tir rehto
 DA deems you.DAT correct
 ‘You seem to be correct there ...’
 (N(P)I, 42,25), (Abraham, 1991)
- (27) ...daz dâ komen waeren ritter vil gemeit
 that DA come were knights very dumb
 ‘... that dumb knights had come.’⁵
 (Nib. 79,2), (Abraham, 1991)

This suggests that the situation prior to ENHG was complex. In addition to the historical subject expletive, *da* (or *thār*), we find evidence for a null expletive in the surviving texts. Some of the functions of this historical null expletive

have been overtaken by an additional expletive, *es*. I suggest that, given the null expletive available in OHG, there was plenty of opportunity for expletive *da* to be replaced by a null form in the grammar. This, combined with independent changes in the function of the homophonous adverb *da*, led to a reanalysis of the subject expletive.

Recall that, when the OHG temporal and locative adverbs *thō* (“then”) and *thār* (“there”) collapsed into a single adverbial element (*da*), it resulted in a situation pronoun with the ability to refer to various aspects of the situation according to context. This development alone was sufficient to cause the ultimate loss of *da* as a subject expletive. Once the adverbial function of *da* was not unambiguously locative, it became difficult to distinguish between the situation pronoun and the homophonous subject expletive. The two forms would almost always occur in the same surface position: because this adverbial is prosodically weak, it tends to occur at the left edge of a clause, near the high subject position which would be occupied by a subject expletive.

By the ENHG period, most examples of *da* either are unambiguously adverbial, or can be analyzed as either the situation pronoun or the subject expletive. It is only in a few cases, and in the overall frequency of clause-initial *da* in subordinate clauses with a subject gap, that we can see clear evidence of the subject expletive. Learners of German after the OHG period would encounter dramatically less unambiguous evidence for the subject expletive than for the situation pronoun. I argue that this would have led to the gradual loss of the form, as learners eventually reanalyzed every instance of *da* as a situation pronoun.

As this change occurred, the subject expletive *da* was gradually replaced by a null expletive. This assumption is motivated by the fact that a null expletive already existed in the grammar of OHG, and was thus available to overtake the function of expletive *da*. Ultimately, *da* lost its expletive function, and occurs only as a situation pronoun in the modern language.

2 An expletive in Old English

The second part of this paper is a speculative exploration of OE. A corpus-based study⁶ 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* for which a locative interpretation is unlikely. In (28), the relative clause discusses days of the calendar, and thus entities which are independent of any location. In (29), meanwhile, there is a full locative phrase (*to þam scypum*), which would make the occurrence of a locative demonstrative redundant.

- (28) Ða 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)
- (29) 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)

These examples are not enormously convincing on their own. However, we have also seen that the overall frequency of *þær* demonstrates 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). 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. In fact, the frequency of subject gap *þær* does not match the “subject-adjacent” pattern (Table N.8). 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).

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.

2.3 Analyzing Old English *þær*

The data suggest, *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* can 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 (Williams, 2000).

English 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):

- (30) 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). 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,*v*P. 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 expletive occurs optionally in subordinate clauses with a subject gap, suggesting that it only occurs when the subject is extracted from a low subject position; however, extraction after the subject has moved through Spec,TP is also possible.

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 already available in OHG. In English, the subject simply lost the option of extracting from a low position in most contexts.

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	144	1832	1976
All other subordinate	11	3045	3056
Total	155	4877	5032

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

	<i>da</i>	No <i>da</i>	Total
Subject gap	138	972	1110
Non-subject gap	6	860	866
Total	144	1832	1976

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

Figure N.1. A relative clause in which the subject is extracted from a low position.

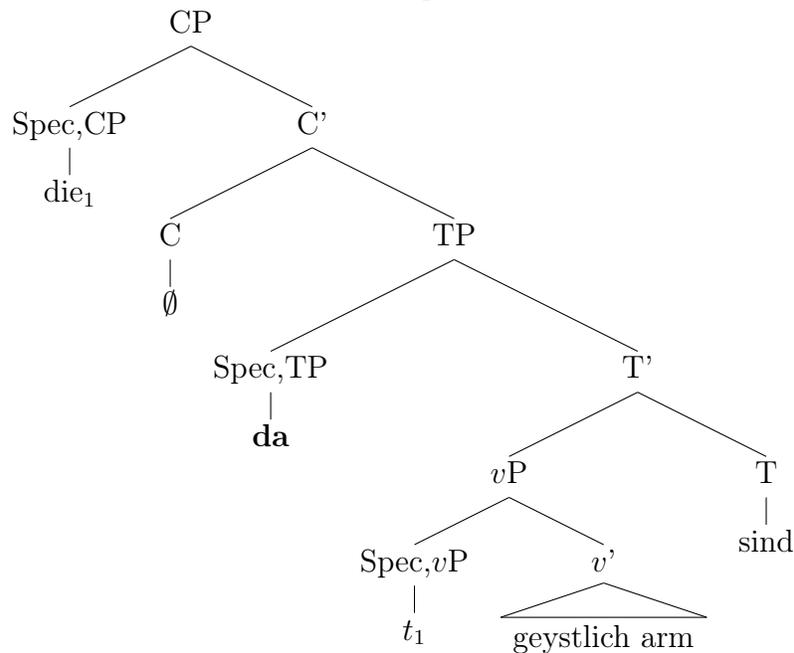


Figure N.2. A relative clause in which the subject is extracted from a high position.

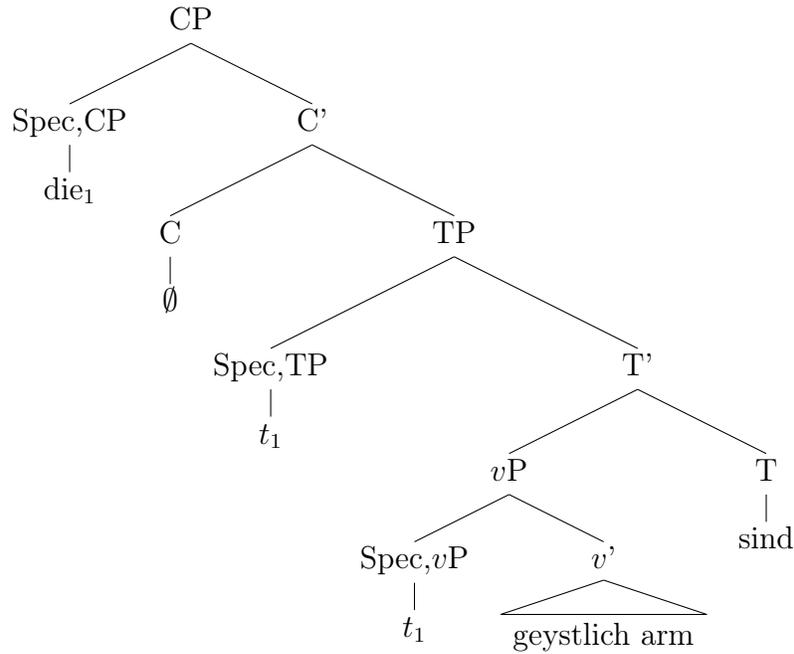


Table N.5. Distribution of *þær* in subordinate clauses.

	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

¹A part of this work previously appeared in the Proceedings of the 36th Annual Meeting of the Berkeley Linguistics Society. I would like to thank Anthony Kroch, Julie Legate, David Embick, Joel Wallenberg, the attendees of BLS 36 and DiGS XII, and my two anonymous reviewers for their advice and assistance on this work. I am also deeply grateful to Beatrice Santorini and Florian Schwarz, who provided the Modern German judgments used in this paper. Of course, any errors are my own.

²In this and subsequent examples from earlier texts, there is some variation in the spelling of *da*: in ENHG, it may be spelled either *do* or *da*.

³Judgments for this example were mixed, but according to a variety of native speakers of English, the grammaticality of the example dramatically improves if the sentence is placed into a context which places a contrastive or focal accent on the subordinate clause verb.

⁴Other accounts offer alternative positions for the two subject positions in Germanic: for example, Haeberli (2005) proposes Spec,TP and Spec,AgrSP. I settle on an account using Spec,TP and Spec,*v*P mainly for simplicity's sake. What matters for my purposes is the existence of two subject positions in Germanic. My argument can be reworked to fit with an alternative analysis of the two subject positions with only minor adjustments.

⁵Abraham presents this example as an ergative construction (“purely rhematic, i.e. presentative”). He consequently claims that it involves a null expletive.

⁶Data for OE was taken from the York-Toronto-Helsinki Parsed Corpus of Old English Prose (Taylor et al., 2003). The data on Middle English is taken from the Penn Parsed Corpus of Middle English (Kroch and Taylor, 2000).

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