
ON THE HISTORICAL DEVELOPMENT OF PRONOUNS REFERRING TO SITUATIONS: THE RISE OF PRE-FINITE ‘EXPLETIVES’ IN GERMAN*

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ABSTRACT At least since [Milsark \(1974\)](#) expletives have been a major research topic in generative linguistics. However, since most relevant work has focused on the present-day languages, many aspects of the historical development of expletives are still unsettled. This applies in particular to the emergence of CP related pre-finite expletives in the history of the Germanic V2 languages. Focusing on German, this paper seeks to shed new light on the diachrony of CP expletive *es* ‘it’ by combining new empirical evidence gathered from a range of corpus studies with a novel theoretical perspective on the syntax and pragmatic functions of so-called ‘expletive’ elements. Paying special attention to the contexts in which pre-finite expletive *es* first appeared, we provide new data on linguistic and extralinguistic factors (such as text type and dialect area) that shaped its development. We show that *es* came to be used as a pre-field filler earlier than previously thought, with the first clear cases dating to the 12th century. In addition, we will investigate the role of light frame adverbials such as *thô/dô* ‘then’ as potential precursors of expletive *es* and address the question of why the latter replaced the former in the history of German. The discussion of the historical data is embedded in a new proposal concerning the discourse function of CP-related expletives. In particular, we argue that ‘expletive’ *es* is not a semantically vacuous element, but rather a demonstrative element with a weak definite reading that is compatible with introducing a new situation (identified with an argument of Tense, cf. [Hinterhölzl 2019](#)) but also with continuing an established reference situation, explaining the success of *es* as a versatile element that anchors the utterance to the context.

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1 INTRODUCTION

Similar to all other Germanic V2 languages, German requires the use of a pre-finite expletive pronoun in root clauses if no other XP is fronted to the initial position (cf. e. g. [Pütz 1985](#)). As shown in (1), the element in question is identical to the 3sg neuter nom./acc. pronoun *es* ‘it’ (cf. e. g. [Breivik 1989](#), [Vikner 1995](#) on related elements in other Germanic V2 languages). Typical contexts include presentational and existential constructions, which lack a topic-comment structure and in which the subject occupies a lower, presumably VP-internal position:

- (1) *Es ist ein neuer Zeuge aufgetaucht [...]*
 it is a new witness turned.up
 ‘A new witness turned up [...]’
 (DeReKo, BRZ09/SEP.06097 Braunschweiger Zeitung, 12.09.2009)

Traditionally, these clause-initial elements are analyzed as semantically empty placeholders, which are not part of the verb’s argument structure and do not apparently contribute much to the meaning of the clause. Accordingly, they have been variously labelled “Vorfeld/prefield-expletives” ([Bayer & Suchsland 1998](#)), “pre-finite expletives” ([Booth 2018](#)), or “expletive topics” ([Faarlund 1990](#)). Although we do not agree with the standard view that these elements are actually semantically vacuous, we will adopt the term ‘CP expletive’ (or ‘pre-finite expletive’) as a general descriptive label for the time being (but see section 5 for a different analysis of this type of ‘expletive’). Moreover, we use the traditional term ‘Vorfeld-*es*’ to refer to the element that occupies the clause-initial pre-finite position in German root clauses like (1).

While the status and theoretical analysis of expletives have attracted much attention in the descriptive and generative literature (for relevant overviews cf. [Vikner 1995](#), [Svenonius 2002](#), [Hartmann 2008](#)), many aspects of their historical development are still under-researched. This is particularly true of CP expletives (earlier work includes [Brugmann 1917](#), [Haiman 1974](#), [Lenerz 1985](#), [Abraham 1993](#)). It is commonly assumed that the rise of the Vorfeld-*es* is connected to the development of generalized V2 (i.e., a generalized EPP feature on C, cf. [Axel 2007, 2009](#), [Hinterhölzl & Petrova 2009](#)). Consider the following quote taken [Brugmann \(1917: 35\)](#) for an early statement along these lines:

“Es kommt hinzu das Bestreben, das sich schon vor dem Aufkommen des syntaktischen *es* eingestellt hatte, die Anfangsstellung des Verbuns mit einem proklitischen Wörtchen zu decken. Hierfür war *es* das gegebene Wort.”

‘In addition, there is an eagerness, which had already developed prior to the emergence of the syntactic [i.e., CP expletive] *es*, to cover the initial position of the finite verb with a proclitic element. To this end, *es* was the appropriate word.’

However, a closer look at the chronology of the changes relating to the verb-second property suggests that the link between the consolidation of V2 and the emergence of *es* as a CP-related expletive is perhaps less tight than commonly assumed. It has been repeatedly pointed out in the literature that generalized V2 was already very much in place in late Old High German (OHG) root declaratives (11th century, cf. [Lawson 1973](#), [Näf 1979](#), [Axel 2007](#) on the works of Notker). In other words, there seems to be a chronological gap of about 150 years between the development of generalized V2 and the first appearances of pre-finite expletive *es*, which is commonly taken to be a mid/late Middle High German (MHG) development (13th/14th century, cf. [Brugmann 1917](#), [Behaghel 1923](#), [Lenerz 1985](#), [Abraham 1993](#), [Paul 2007](#), [Axel 2009](#)).

A potential solution to this puzzle is to assume that the rise of a rigid V2 syntax was accompanied by the development of an earlier CP expletive (or elements that could assume the role of a SpecCP filler) that was later replaced by *es*. Potential candidates are phonetically and semantically light deictic frame adverbials such as *thô/dô* ‘then’ and *thar/da* ‘there’, which frequently occupy the clause-initial position in OHG (for details cf. [Axel 2007](#), [Pfenninger 2009](#), [Donhauser & Petrova 2009](#), [Fuß 2008](#) and section 3 below). This idea is supported by the observation that there seems to be an intermediate historical stage in which light adverbials are used in the very same contexts as present-day *es*. Relevant evidence comes from existential and presentational sentences as shown in (2)–(4) with different translations of the same passage from the Christmas story of the New Testament:

(2) **early OHG: V1**

uuarun thô hirta In thero lantskeffi uuahante [...]
were then shepherds in that country abiding

Lt. *Et pastores erant In regione eadem. uigilantes [...]*

‘And there were shepherds abiding in the fields [...]’

(Tatian, 85,29; Lk, 2,8)

(3) **later OHG: *tho*+V2**

Tho wárun thar in lánthe hirta háltente [...]
then were there in land shepherds resting

(Otfrid, Ev. I. 12,1)

(4) **MHG/ENHG: *es*+V2**

es waren Hirten in der selbigen gegend auff dem felde
 it were shepherds in the same area on the field

(Luther 1545 (letzte Hand))

In early OHG, existential and presentational sentences are marked by a V1 order as in (2). However, with the consolidation of V2, *thô* could apparently be used to fill the clause-initial position in these contexts, before this function was taken over by the CP expletive *es*, which emerged in MHG. While this scenario accounts for the chronological gap between the development of generalized V2 and the rise of the CP expletive *es*, it also raises a set of new questions. First, if *thô* indeed acted as a (quasi) CP expletive at some point, the development of another CP expletive seems particularly mysterious, because the relevant function had already been assigned to another element. Thus, in addition to general questions concerning the actuation and emergence of *es* as a CP expletive, we must ask why *es* was apparently better suited for this function than earlier *thô*, leading to the replacement of the latter by the former in the MHG and Early New High German (ENHG) periods. Moreover, as will be shown below in section 3, the assumption that frame adverbials served as quasi-expletives faces some problems of its own, as relevant patterns seem to be quite rare in late OHG.

This paper addresses these questions by taking a closer look at the distribution of the relevant elements in the reference corpora of historical German (OHG: Donhauser, Gippert & Lühr 2018; MHG: Klein, Wegera, Dipper & Wich-Reif 2016), focusing on the rise of the Vorfeld-*es* in MHG. We will pay special attention to the contexts in which expletive uses of *es* first appeared and provide new data on linguistic factors (such as type of subject) and extralinguistic factors (such as genre and dialect area) that shaped its development. The major findings include the observation that *es* came to be used as a prefield filler earlier than previously thought, with the first clear cases dating to the 12th century (possibly even earlier, cf. Pfenninger 2009). In addition, we will investigate the role of light frame adverbials such as *thô/dô* ‘then’ as potential precursors of the Vorfeld-*es* and address the question of why the latter replaced the former in the history of German. The discussion of the historical data is then complemented by new proposals concerning the discourse function and theoretical analysis of CP-related expletives. In particular, we argue that ‘expletive’ *es* is not a semantically vacuous element, but rather a demonstrative element with a weak definite reading that can introduce a new situation (identified with an argument of Tense, cf. Hinterhölzl 2019).

The paper is structured as follows. Section 2 briefly discusses the properties of *Vorfeld-es* in present-day German. Section 3 gives an overview of previous work on the historical development of CP expletives in German, highlighting a number of open questions that are addressed later. Section 4 presents the results of a corpus study which traces the development of the *Vorfeld-es* in Middle High German and discusses a set of factors that shaped this change. In sections 5 to 7, we take a closer look at the discourse function and theoretical analysis of so-called expletives. Section 5 introduces a set of preliminaries for the theoretical account of non-referential uses of *es* that is developed in section 6. Section 7 discusses how these considerations shed new light on the historical emergence of these elements in the history of German. Ideally, these findings apply not only to the German facts, but are also relevant for the more general question of how and why CP expletives evolved across the Germanic family. Section 8 provides a brief conclusion.

2 PROPERTIES OF VORFELD-ES IN PRESENT-DAY GERMAN

As is well known, ‘pure’ CP expletives like present-day German (PDG) *es* ‘it’ (or Icelandic *það*, cf. e. g. [Vikner 1995](#)) are confined to the initial position of V2 clauses, that is, they cannot appear in the T-domain in either main or embedded clauses.¹ This is illustrated with an impersonal passive in (5) and a presentational construction in (6). Note that in (6) the finite verb does not agree with *es* ‘it’ but rather with the post-finite plural subject.²

1 In Mainland Scandinavian (MSC), the expletive element is not restricted to the prefinite position; rather, it is also required in the (postfinite) subject position, similar to English (cf. e. g. [Vikner 1995](#)):

- (i) *Det dansades i går.*
EXPL dance.PST.PASS yesterday
- (ii) *I går dansades det*
yesterday dance.PST.PASS EXPL
(Swedish, [Booth 2018](#): 143)

2 In a similar vein, the expletive *það* can only appear in prefinite position in Icelandic. Note, however, that in contrast to other Germanic languages, Icelandic lacks other non-referential pro-forms, so the same contrast can be observed e. g. with weather verbs:

- (i) *Það rignði í gær.*
EXPL rained yesterday
- (ii) **Í gær rignði það.*
yesterday rained EXPL
‘It rained yesterday’ ([Booth 2018](#): 57)

- (5) (a) *Es wird getanzt.*
it is danced
(b) *weil (*es) getanzt wird*
because it danced is
(c) *Heute wird (*es) getanzt.*
today is it danced
- (6) [thetic/presentational sentences]
(a) *Es kamen drei Männer hinein.*
it came-PL three men in
'Three men came in.'
(b) *Kamen (*es) drei Männer hinein?*
(c) *dass (*es) drei Männer hinein kamen-*

The function as a CP expletive must be distinguished from other instances where *es* is used as a non-referential pronoun (cf. e. g. Pütz 1985). As shown in (7), *es* can also be used as a quasi-argument (e. g. with weather verbs) and a cataphoric pronoun relating to an extraposed clause. In contrast to the CP expletive, quasi-argumental and cataphoric *es* trigger 3sg agreement on the verb and can appear in post-finite position.³

- (7) (a) *Heute regnet *(es).*
today rains it
'Today, it is raining.' (quasi-argument *es*)
(b) *Heute hat *(es) mich überrascht, [dass es regnet].*
today has it me surprised that it rains
'Today, it has surprised me that it is raining.' (cataphoric *es*)

As already briefly mentioned, CP expletives typically appear in the absence of a topical subject. Relevant contexts include subjectless constructions (e. g.,

³ Note that the additional non-referential uses of *es* do not show a uniform behavior. While quasi-arguments are obligatory, the insertion of a cataphoric pronoun is often merely optional, although it is close to obligatory in some contexts depending on factors like choice of matrix predicate and (non-)finiteness of the clausal complement (Sternefeld 2008: 347f.). Note that these additional non-referential pro-forms can also occupy SpecCP, leading to ambiguous expressions where the status of the clause-initial element is not entirely clear:

- (i) **(Es) hat Anna überrascht [dass Ludwig das Turnier gewonnen hat].*
it has Anna surprised that Ludwig the tournament won hat
'It surprised Anna that Ludwig won the tournament.'

impersonal passives as in (5) above; cf. Booth 2018 on a wider range of subjectless constructions in Icelandic) as well as existential and presentational constructions, which lack a topic-comment structure and introduce a new entity into the discourse (typically realized as an indefinite subject). Existential sentences often specify the location of a discourse-new entity as in (8), while presentational sentences describe an (new) event in which a discourse-new entity participates as in (9).

- (8) *Es ist [sehr viel Schnee] auf den Straßen.*
EXPL is very much snow on the roads
'There is very much snow on the roads.'
- (9) *Es kam [ein kleiner älterer Herr] auf die Bühne,*
EXPL came a small elderly gentleman onto the stage,
der sehr freundlich „Guten Abend“ sagte.
who very kindly good evening said
'A small elderly man entered the stage, who very kindly said 'good evening'.' (<https://www.suedkurier.de/ueberregional/kultur/Klaus-Doldinger-hat-s-noch-immer-drauf;art10399,9914197>)

However, the use of expletives is not only governed by sentence-internal information-structural properties; it is also linked to certain functions at the level of the text/discourse. More precisely, sentences introduced by CP expletives are typically found at the beginning of texts and text sections, introducing new situations and establishing a new temporal interval that is independent from the preceding discourse context. This has been known for quite some time, as can be seen from the quote taken from Brugmann (1917: 36f) on German *es* 'it' (and its predecessors):

„Mit dem syntaktischen *es* werden seit mhd. Zeit gerne Sätze gebaut, die die Einleitung zu Erzählungen bilden [...]; in der ahd. Zeit bedurfte man in diesem Fall noch keiner Deckung der Anfangsstellung des Verbuns. Doch hat sich unser *es* auch vielfach da eingestellt, wo man im Ahd. *thō*, im Mhd. *dō* (nhd. *da*) bei Anfangsstellung der Verbform verwendete.“

'Since Middle High German (MHG) times, the syntactic *es* has been used to build sentences which form the introduction to narratives [...]; in Old High German (OHG), it was still not necessary to cover the clause-initial position of the verb in these cases [by placing another element in front of the verb]. However, our *es* has often developed in contexts where OHG used

thô and MHG *dô* (present-day German *da*) when the verb would otherwise occur in clause-initial position.’

3 THE RISE OF CP EXPLETIVES IN THE HISTORY OF GERMAN

In the following two sections, we will briefly sketch the historical development of CP expletives in German, discuss some earlier theories concerning their emergence, and highlight a number of research questions that have not been properly addressed in previous work.⁴

3.1 Old High German: *thô/dô* ‘then’ as an adverbial expletive?

It is usually assumed that Early Germanic lacked CP expletives; instead, subjectless, existential and presentational constructions often exhibit V1-order (cf. Faarlund 1990, 2004 on Old Norse, Falk 1993 on Old Swedish, Axel 2007, Donhauser & Petrova 2009, Hinterhölzl & Petrova 2009 on Old High German, Booth 2018 on Old Icelandic). This is illustrated in (10)–(12) with a set of relevant early OHG examples. Note that in these cases the immediate post-finite position is often occupied by a light frame adverbial (in particular *thô/dô* ‘then’, *thâr/dâr* ‘there’; sometimes *nu* ‘now’), cf. Petrova (2006), Donhauser & Petrova (2009); see Booth (2018) on Old Icelandic.

- (10) *uuas tho zit nah sehsta*
 was then hour after sixth
 (subjectless construction)
 Lat. hora erat quasi sexta;
 ‘it was about the sixth hour’ (Tatian 275,29; Axel 2007: 142)

- (11) *uuas thar ouh sum uuitua/ in thero burgi ...*
 was there also some widow in that city
 (existential construction)
 Lat. vidua autem quaedam erat /In ciuitate illa ...
 ‘There was also a widow there in that city...’
 (Tatian 201, 2; Axel 2007: 121)

- (12) *giengun thô zuo gotes engila*
 went then to God’s angels
 (presentational construction)

⁴ Relevant earlier work includes Miklosich (1883), Brugmann (1917), Paul (1919: 26, 71, 128), ²⁵(2007), Behaghel (1923, 1928), Haiman (1974), Lenerz (1985), Grosse (1990), Abraham (1993), Vogel (2006), Axel (2007, 2009), Pfenninger (2009), Czicza (2010), and Light (2015).

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Lat. Et ecce angeli accesserunt
'God's angels came' (Tatian 115,30; Axel 2007: 121)

In other words, it appears that *iz*, the OHG predecessor of the PDG pronoun *es* 'it', was confined to the following functions (cf. Brugmann 1917, Grosse 1990, Axel 2007):

- a referential 3sg neuter personal pronoun ('it')
- a non-referential quasi-argument used e. g. with weather verbs (still optional in OHG) and in certain impersonal constructions
- a cataphoric pronoun referring to an extraposed clause

The non-referential uses of OHG *iz* are illustrated in (13) and (14).

(13) *uuanta iz abandet...*
since it evening-becomes
(quasi-argument)
'Evening is falling.'
(DDD-AD-Tatian_1.1 > T_Tat228 (edition 24 – 34))

(14) *Iz dêta imo thiu fâsta, [thaz inan es gilústa]*
it did him.DAT the.NOM fast.NOM that him.ACC it lust-for
(cataphoric *es* 'it')
'Fasting made him crave for it [for bread].' (Otfrid, II, 4, 45)

The apparent absence of a CP expletive in OHG is somewhat unexpected. It is often assumed that across the Germanic family there is a systematic connection between generalized V2 and the availability of CP expletives (cf. Vikner 1995), and V2 seems to be firmly established in late OHG (cf. Lawson 1973, Näf 1979, Axel 2007 on the works of Notker). To account for the gap between the consolidation of V2 and the development of the CP expletive *es*, it has been proposed that the rise of generalized V2 was accompanied by a change in which light deictic frame adverbials such as *thô/dô* 'then' and *thâr/dâr* 'there' came to be used as quasi-expletive elements before this function was assumed by *es* (cf. Axel 2007, Pfenninger 2009, Fuß 2008, Donhauser & Petrova 2009; see Light 2015 on *da* 'then, there' as a subject expletive in

ENHG).^{5,6} In what follows, we will therefore take a closer look at the syntax and discourse-pragmatic functions of these elements, focusing on *thô/dô* ‘then’ (see Petrova 2006, Axel 2007, Donhauser & Petrova 2009, Cognola 2023 for more detailed analyses of the syntax and pragmatics of *thô/dô*).

It is a well-known fact that the Early Germanic languages make frequent use of light frame adverbials as discourse-structuring devices. In what is perhaps their most obvious function, temporal adverbs such as OHG *thô/dô*, Old English (OE) *þa* and Old Saxon (OS) *tho* are used as deictic elements that relate the temporal setting of the clause to a previously established temporal interval, often in correlative constructions:⁷

- (15) [*mit diu er tho uzgieng*], *tho quad ther heilant* [...]

when he *thô* out-went then said the Savior

‘As he was going out (of the temple), Jesus said [...].’

(Tatian, 159, 7)

However, recent work has shown that *thô/dô* could assume at least three different discourse-pragmatic functions dependent on its position relative to the (finite) verb and other constituents of the clause. First, it has been argued that *thô/dô* introduces a new foregrounded action/event/situation when it directly follows the finite verb in a V1 declarative (Betten 1987, Donhauser & Petrova 2009, Hinterhölzl & Petrova 2009). In other words, patterns such as

5 Cf. also Brugmann (1917: 30), who suggests that the emergence of the Vorfeld-*es* was promoted by the earlier use of clause-initial *da/do* in these contexts:

“Unterstützt wurde das Aufkommen dieser Ausdrucksweise dadurch, daß beiderseits, bei den zu Intransitiva und den zu Transitiva gehörigen Impersonali, von alter Zeit her im Eingang vielfach proklitische Partikeln, wie *da*, im Gebrauch gewesen sind: *da wurde gekämpft* wie *da wurde gesagt, daß ...*”

‘The emergence of this type of expression [i.e., the expletive use of *es*] was promoted by the fact that from ancient times on, proclitic particles like *da* were often used at the beginning of transitive as well as intransitive impersonal constructions: *da wurde gekämpft* [lit. ‘there was fought’] as well as *da wurde gesagt, daß* [lit. ‘there was said that’]...’

6 Expletive *do/da* is still found in present-day dialects (cf. Mayerthaler & Mayerthaler 1990: 406, Weiß 1998):

- (i) *Do/*Es is gsunga und gtanzt worn.*
EXPL is sung and danced been
‘There was singing and dancing.’

7 The anaphoric and deictic functions of OHG *thô/dô* ‘then’ and its cognates in other Early Germanic languages can be traced back to a common origin as a Proto-Germanic/Proto-Indo-European demonstrative root (PIE **so/*tod* ‘this, that’; cf. Ramat 1981, Beekes 2011: 226).

(10)–(12) above establish what Asher & Lascarides (2003) call coordinating discourse relations, which serve to push forward the main story line on the highest level of discourse organization. In contrast, V2 clauses typically establish subordinating discourse relations, which do not narrate main events of a story line, but introduce backgrounded additional information on a discourse unit situated on a higher level of discourse hierarchy (what Asher & Lascarides 2003 call “elaboration”). However, it turns out that V2 clauses introduced by *thô/dô* are not confined to expressing subordinating relations. Petrova (2006) and Donhauser & Petrova (2009) show that this structural option can also be used to mark coordinating relations at a lower level of discourse organization, in particular in cases where the clause introduces a new stage/phase of a given situation (usually continuing an existing temporal interval, sometimes labeled “coordinative continuation”) as is typically the case in dialogic sequences where the clause-initial discourse linker marks a change of speaker/turn taking, often in connection with *verba dicendi* (Tatian: 97 of 115 instances according to Donhauser & Petrova 2009: 19; see also Catasso, Coniglio, Bastiani & Fuß 2021):⁸

- (16) **Thô** gihortun inan thie iungiron sprechantan inti folgetun themo heilante. **Thô** hiuuanta sih ther heilant inti gisah sie imo folgente, quad in: uuaz suochet ir? Sie quadun imo: rabbi (thaz ist arrekit meistar) uuâr artos? **Thô** quad her in: quemet inti gisehet.
(Tatian 16.2)

Lt. John 1.37. *Et audierunt eum discipuli loquentem et secuti sunt Ihesum.* 38. *Conuersus autem Ihesus et videns eos sequentes se, dicit eis: quid queritis? Qui dixerunt ei: rabbi (quod dicitur interpretatum magister) ubi habitas?* 39. *Dicit eis: venite et videte.*

‘The two disciples heard him speak, and they followed Jesus. Then Jesus turned, and seeing them following, said to them, “What do you seek?” They said to Him, “Rabbi” (which is to say, when translated, Teacher), “where are you staying?” He said to them, “Come and see.”

⁸ Catasso et al. (2021) discuss still another pattern where *thô/dô* (and its cognates in OE and OS) appears directly to the right of a fronted XP (in OHG usually a pronoun), giving rise to V3 order:

- (i) *sie tho antalengitun imo. neîn*
they dô answered him.DAT no
‘They said to him: ‘No.’
Responderunt ei: non (Tatian 337, 10–11)

Catasso et al. argue that *thô/dô* is used here as a topic marker that signals a shifting topic.

In addition, there are indications that V2 clauses introduced by *thô/dô* could assume discourse functions formerly expressed by V1 order (marking foregrounded coordinating discourse relations). This is illustrated by the minimal pair in (17); additional examples of relevant existential/presentational sentences introduced by *thô* (and *thâr*) are given in (18).

- (17) (a) *uuarun thô hirta In thero lantskeffi uuahante [...]*
 were then shepherds in that country abiding
 ‘And there were shepherds abiding in the fields [...]’
 (Tatian, 85,29; Lk, 2,8)
- (b) *Tho wárun thar in lánthe hirta háltente [...]*
 then were there in land shepherds staying
 (Otfrid, Ev. I. 12,1)
- (18) (a) *tho uuas man In hierusalem*
 then was man in Jerusalem
 Lat. *homo erat in hierusalem*
 ‘There was a man in Jerusalem...’ (Tatian 37,23; Lk, 2,25)
- (b) *Thar was ein mán fruater joh édilthegan gúater, [...]*
 there was a man wise and noble-warrior good
 ‘There was a wise man, a good and noble warrior [...]’
 (DDD-AD-Otfrid_1.1 > O_Otfr.Ev.2.12 (edition 5 – 22))

In (17b) and (18) the clause-initial frame adverbial seems to fulfil exactly the same function (a syntactic placeholder occupying SpecCP) as PDG *es* ‘it’. Hinterhölzl & Petrova (2009: 323) argue that this is the result of an analogical change in which V2-patterns used for marking coordinating discourse relations at a lower level (“coordinating continuation”) are extended to foregrounded coordinating relations at the highest discourse level, introducing a new situation or a new temporal interval (possibly, this extension is linked to the general consolidation of the V2 pattern). Further evidence in support of the view that *thô/dô* turned into an adverbial CP expletive comes from the following observations (cf. Axel 2007, Donhauser & Petrova 2009; see also Cognola 2023).⁹ First of all, it has been pointed out that *thô/dô* is a semantically light, underspecified element. It could be used to translate a variety of

⁹ Cognola (2023) analyzes *thô/dô* as a CP expletive located in SpecTopicP in the left clausal periphery. She assumes that *thô/dô* is intimately connected to the licensing of free inversion and null subjects in OHG. More precisely, she argues that, with unaccusative and passivized verbs, *thô/dô* is merged as a locative argument (an aboutness topic) which moves to SpecTopicP and licenses an empty *pro* in SpecTP (which in turn blocks raising of a lower DP subject). A different analysis is proposed for *thô/dô* in connection with *verba dicendi* – here she proposes that *thô/dô* is a situational argument that is directly merged in SpecTopicP (see also Sluckin 2021).

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different elements (conjunctions such as Lat. *et*, discourse particles like Lat. *autem*; cf. Betten 1987), and it could be doubled by other temporal adverbs as in the following example (Axel 2007: 156):

- (19) *inti uuas tho giheilic ira tothter [fon dero ziti]*
and was then healed her daughter from that hour
Lat. [...] & *sanata est filia illius ex illa hora.*
'And her daughter was healed from that hour.' (Tatian, 273,31)

Second, there are cases where clause-initial *thô/dô* does not seem to receive an anaphoric interpretation (quite similar to *Vorfeld-es* in present-day German; cf. Donhauser & Petrova 2009: 21 on (20)). This is particularly clear when it co-occurs with stative verbs like *to be* where an interpretation in terms of a temporal anaphor is unlikely:

- (20) *thô uuas thiu zehenta zît dhes tages*
then was the tenth time of-the day
Lat. *hora autem erat quasi decima*
'it was the tenth hour of the day' (Tatian, 51,15)

- (21) *Tô uuârd tâz ten chéiser lústa. dâz er dioterichen*
then was that the.ACC emperor like that he Theodoric
urûntlichô ze hóue lâdeta.
warmly to court invite
'And it befell that the emperor wanted to warmly invite Theodoric to his court.' (Notker, Boeth., 5,21)

Nonetheless, there are also a number of facts that challenge the view that *thô/dô* developed into a CP expletive during the OHG period. First of all, *thô/dô* does not seem to be devoid of lexical meaning, in contrast to other expletive elements, which usually undergo some amount of semantic bleaching. Even in examples such as (20) and (21), an adverbial interpretation of *thô/dô* in terms of 'at this point/time' cannot be ruled out entirely. Second, it has been pointed out that the use *thô/dô* is subject to a number of restrictions that are not found with other CP expletives in the present-day V2 languages. In particular, it appears that *thô/dô* is confined to sentences with preterite verb forms (Axel 2007: 157). It has also been noted that it is absent in *wh*-questions (Petrova & Solf 2008, Fuß 2008, Cognola 2023). Moreover, Donhauser & Petrova (2009) show that the position of *thô/dô* affects its distribution over verb classes in the OHG Tatian. While postfinite *thô/dô* appears with a wide variety of different verb classes, prefinite *thô/dô* is more or less

confined to *verba dicendi*.¹⁰ Again, this is not what we would typically expect if *thô/dô* are taken to be CP expletives. Moreover, a search carried out in the Old German reference corpus (Donhauser, Gippert & Lühr 2018) shows that, contrary to expectations, *thô/dô* does not seem to occur as a prefinite element in clauses with a lower indefinite subject in late OHG (that is, in contexts that could be used as existential/presentational constructions), see Figure 1.¹¹

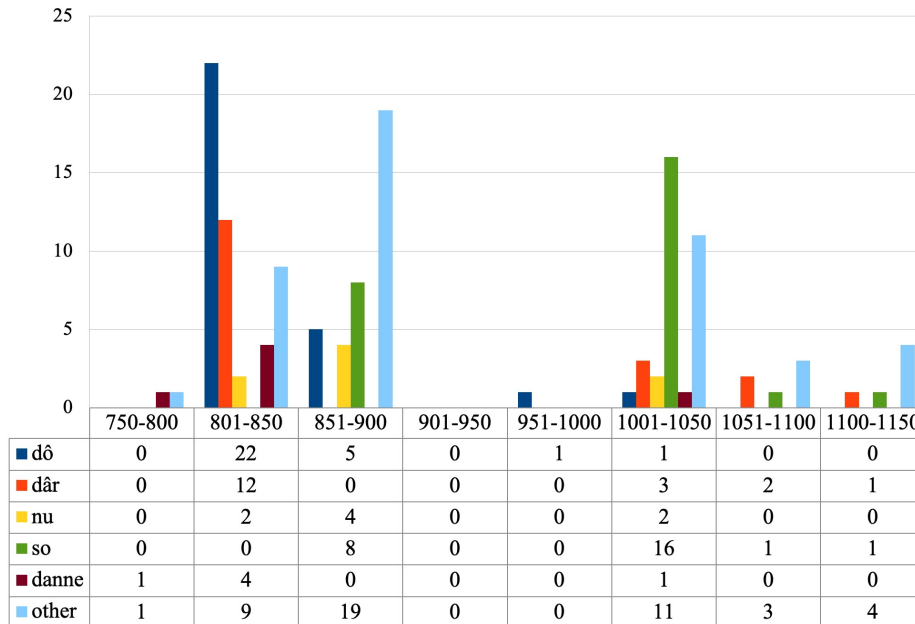


Figure 1 OHG clauses introduced by an adverbial element with a postfinite indefinite subject

¹⁰ Cognola (2023) claims that *thô/dô* is confined to *verba dicendi*, negated sentences, passives and unaccusatives when it co-occurs with a low subject in cases of apparent free inversion (where the subject appears to the right of a post-finite verb). However, it is not clear whether this assertion is compatible with the observations by Donhauser & Petrova (2009).

¹¹ The numbers in Figure 1 are based on the following query, which identifies postfinite, unambiguously indefinite subjects in clauses introduced by an adverb: `pos=/ADV/ & pos=/VAFIN|VVFIN|VMFIN/ & clause="CF_U_M" & pos=/DI|DIA|DIN|DINEG|DINEGN|DINEGS|DIS|PI|PINEG/ & inflection=/.*NOM.*/ & lang="goh" & #1_1_#3 & #1.#2 & #4_=#5 & #2.1,4 #4 & #1=#6`. Note that we have excluded determinerless subjects, because these could also receive a definite interpretation in OHG. The fact that prefinite *thô/dô* is quite rare in Notker's works is perhaps an epiphenomenon linked to text type/genre: the use of the discourse-linker *thô/dô* is particularly common in narrative texts (see also section 4 below), while Notker's works – apart from his highly influential translation of the Psalter – primarily deal with philosophical and scientific issues.

While the proposal that light frame adverbials came to be used as CP expletives in OHG accounts for the chronological gap between the development of generalized V2 and the rise of the CP expletive *es*, it also raises some new questions. In addition to the problems already mentioned, we might wonder which factors led to the emergence of *es* as a prefinite expletive and why *es* was apparently better suited for this function than earlier *thô/dô*, leading to the replacement of the latter by the former in the MHG and ENHG periods.

3.2 Middle High German and Early New High German

In the Middle High German (MHG) period, *es* acquires a set of additional functions. In particular, it begins to appear in prefinite/clause-initial position with existential and presentational constructions and subjectless clauses (impersonal passives of intransitive verbs). This development is often claimed to have taken place in mid/late MHG (i.e., ~13th/14th cent., cf. Brugmann 1917, Behaghel 1923, Lenerz 1985, Abraham 1993, Vogel 2006, Paul 2007, Axel 2007, 2009), first in presentational/existential constructions and somewhat later in subjectless impersonal passives (cf. e. g. Brugmann 1917). Two examples of relevant presentational constructions from our data sample are shown in (22); an early example of an impersonal passive introduced by ‘it’ is given in (23) (see Vogel 2006 for details on the historical development of impersonal passives in German).

- (22) (a) *Iz giengen zwei mensch in ein goteshuos vnd baten*
it went two men in a god-house and prayed
da
there
‘Two men went into a church and prayed there.’
(13:2; Mettener Predigtsammlung, 73ra,29-30)
- (b) *Ich wil vich ein glichnisse sagen. ez giengen*
I want you a parable tell. it went
ze einem mâle ein vuhs vnd ein katze mit einander über
once a fox and a cat together across
velt. dô sprach der vhus [...]
field. then spoke the fox
‘A fox and a cat went together across a field. Then the fox said
[...]
- (14:1; Nikolaus von Straßburg: Predigten (C), 72rb,13-16)

- (23) *ez-n wart nie geste mēre baz gepflegn*
 it-not were never guests-GEN.PL more better treated
 ‘Never again were guests better treated.’
 (Nib. C, 698; Brugmann 1917: 30)

It is by now generally accepted that the expletive use of *es* developed from a reanalysis of other non-referential instances of *es* (Brugmann 1917, Axel 2009).¹² Brugmann (1917) proposes that cases such as (24) where *es* refers cataphorically to an extraposed argument clause provide a likely bridging context in which *iz* ‘it’ can turn into a CP expletive.

- (24) *Iz dēta imo thiu fāsta, [thaz ínan es gilústa]*
 it did him.DAT the.NOM fast.NOM that him.ACC it lust-for
 ‘Fasting made him crave for it [for bread].’ (Otfrid, II, 4, 45)

This proposal receives further support from the observation that cataphoric *es* is merely optional in all historical stages of German and can therefore be analyzed either as a cataphoric or an expletive element when occurring in prefinite position.¹³ This ambiguity still persists in present-day German (cf. e. g. Sternefeld 2008: 347f.):

- (25) (a) **(Es) gefällt mir, dass es endlich Sommer ist.*
 it pleases me that it finally summer is
 (b) *weil (es) mir gefällt, dass es endlich Sommer ist.*
 since it me pleases that it finally summer is
 ‘(since) it pleases me that it is finally summer.’ [...]

The development of expletive uses of *es* was presumably promoted by a number of additional factors including the consolidation of V2 (cf. already Brugmann 1917: 35); see section 4 for another potential bridging context involving

12 Note that this scenario contradicts the traditional assumption that CP expletives predate subject expletives. For example, Haiman (1974) and Lenerz (1985) assume that subject expletives develop from a reanalysis of CP expletives, which widens the distribution of expletive pronouns and eventually leads to the loss of the distinction between CP- and TP-related expletives (as e. g. in Mainland Scandinavian). However, recent work by Booth (2018) and Kinn (2016) shows that non-referential subject pronouns are attested prior to the development of CP expletives in the Scandinavian languages, which suggests that this approach cannot be correct.

13 See Axel (2009) for a related proposal based on the assumption that instances of clause-initial quasi-argumental (and cataphoric) *es* were reanalyzed as CP expletives by speakers who still allowed pro-drop with non-referential subjects and could therefore (re)analyze the overt *es* as a pure CP expletive not linked to the verb’s argument structure.

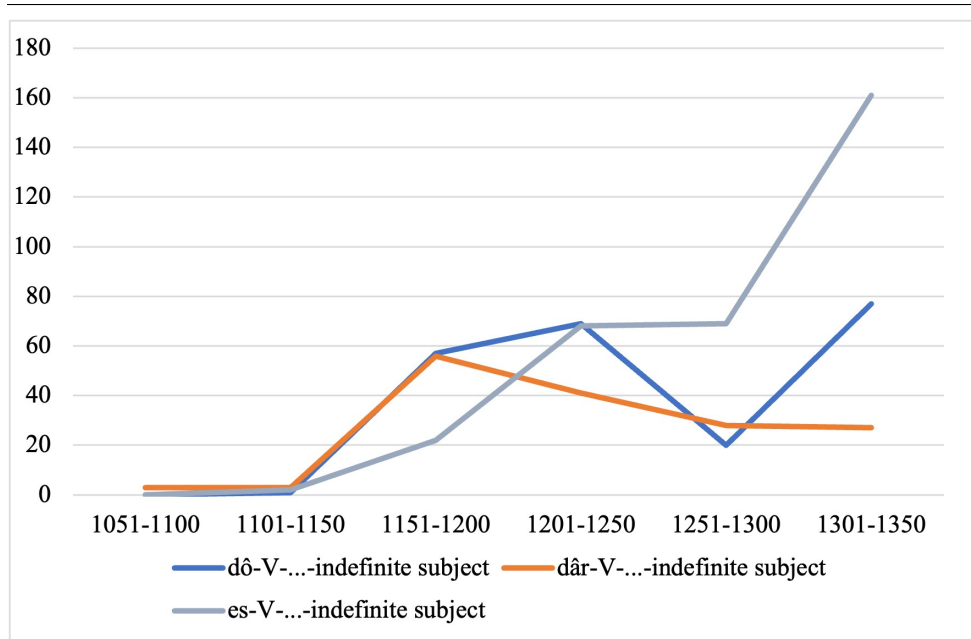


Figure 2 Clauses with initial *dô/dâr/es* and a postfinite indefinite subject (MHG)

a referential use of *es* in connection with the element *alles* ‘all’, which was ambiguous between a reading as an indefinite pronoun and adverbial in earlier stages of German.¹⁴

According to Brugmann (1917: 34), the use of expletive *es* is already quite common, but not obligatory in MHG existential and presentational sentences. The graph in Figure 2 displays the changing frequencies (absolute numbers) of clause-initial *dô/dâr* and *es* in construction with a postfinite indefinite subject in the MHG period.¹⁵

In the Early New High German (ENHG) period, the use of the Vorfeld-*es* becomes even more firmly established (see Fuß 2009 for some relevant ob-

¹⁴ In functionalist approaches, it is often assumed that, after the loss of V1-orders, the expletive use of *es* evolved as a new means to markthetic sentences, or, more generally, sentences with a rhematic subject (cf. e. g. Vogel 2006, Czicza 2010).

¹⁵ Figure 2 is based on the following query in ReM: `punc=/.E/ & lemma=/dâr|dô/ & pos=/VVF|V|VMF|VAF|VAFIN/ & inflection=/.*Nom.*/ & pos=/DIA|DIS|DIART|DGS|DIN|DID|DGA|DGN/ & #1 . #2 & #2 . #3 & #3 .1,4 #4 & #4 _#5.`

servations); in addition, it is used in further contexts such as existential constructions of the type *es* + *geben* ‘give’ (16th century, cf. Newman 1998).

However, up to now a detailed quantitative study of the frequency and distribution of *Vorfeld-es* across construction types in various historical periods is still wanting. The majority of the observations and proposals concerning its development are based on at best impressionistic evidence. As is shown in section 4, the availability of large searchable corpora offers an opportunity to take a closer look at the relevant changes, with the possibility of unearthing new (quantitative) evidence and gaining a better understanding of the relevant historical developments.

4 THE RISE OF VORFELD-ES IN MHG: A CORPUS STUDY

To reassess the historical evidence and get a better understanding of the contexts in which *es* is (first) used as an expletive in the time course of the change, we carried out a corpus study in the MHG reference corpus (ReM, Klein, Wegera, Dipper & Wich-Reif 2016). We extracted all cases where *es* directly precedes the verb and is directly preceded by a sentence boundary.¹⁶ The search produced 1,769 hits, which were manually narrowed down to 444 cases where *es* is used as a CP expletive (excluding doublets, annotation errors, and instances of subject/quasi-argument *es*, cataphoric *es*, and subject/personal pronoun *es*).¹⁷ In what follows, we take a look at a selection of linguistic and extralinguistic factors that govern the distribution of *Vorfeld-es* in our sample, focusing on time, definiteness of the subject, and genre/text type.

4.1 Time

Table 1 displays the distribution of *Vorfeld-es* across time (intervals of 50 years) in our MHG sample.¹⁸ Since ReM includes only two texts from the

¹⁶ We used the following query (i) for prefinite *es* and (ii) for cases with a negative particle intervening between *es* and the finite verb.

- (i) `punc=/.E/ & lemma="ër" & inflection=/Neut.Nom.Sg.3/ & pos=/VVFİN|VMFİN|VAFİN/ & #1 . #2 & #2=_#3 & #2 . #4`
- (ii) `punc=/.E/ & lemma="ër" & inflection=/Neut.Nom.Sg.3/ & lemma="ne" & pos=/VVFİN|VMFİN|VAFİN/ & #1 . #2 & #2=_#3 & #3 . #4 & #4 . #5`

¹⁷ In addition, we extracted 5,582 instances of clause-initial *dô/dâ* (including 121 cases of the pattern *do-ne-Vfin*) and 1,637 cases of *dar* (including 88 cases of the pattern *dar-ne-Vfin*), which we have only begun to sift. But see below for a first comparison of the distribution of prefinite *es* and *dô/dâ* across different text types.

¹⁸ For the purpose of clarity, we slightly modified the annotated time information to fit the data into intervals of 50 years. In cases where ReM gives dates like “12,2-13,1” (‘second half of 12th

Time interval	Vorfeld- <i>es</i> (absolute numbers)
1050–1100	0
1100–1150	2
1150–1200	35
1200–1250	70
1250–1300	113
1300–1350	214
1350–1400	7

Table 1 Vorfeld-*es* in ReM – distribution over time

second half of the 14th century, the number of expletive uses of *es* is here quite small. The normalized frequencies (hits per million words) are given in Figure 3.¹⁹

As expected, the bulk of relevant examples are from the 13th and 14th century. However, there is a number of earlier cases (37 in our sample) dating from the 12th century. An early example from the first half of the 12th century is given in (26), which shows a passive clause with a postverbal subject where the initial position is occupied by *es*, clearly an expletive. Some additional early cases are shown in (27).²⁰

- (26) *Ez ist geborn der heilant der die werlt alle erlosen sol*
 it is born the Saviour who the world all deliver should
 ‘The Saviour was born, who should deliver the world...’
 (12:1; *Londoner Predigt (fragment)*, 39va,9-10)²¹

century to first half of 13th century’), we consistently chose the earlier value; in some cases, where ReM fails to include relevant information (as e. g. in the case of the *Iwein*), or deviates from its standard format “1x,1/2” (as in the *Nürnbergger Stadtbuch*), we added relevant data (in three cases, no information on the dating could be found). As expected, Pearson’s chi squared test finds a highly significant relationship between the two variables (time and number of cases of expletive *es*; chi-squared = 586.67, df = 6, p < 0.001).

19 Since ReM does not provide annotations for clause boundaries, we decided to take text size as the normalization metric, rather than number of matrix clauses.

20 At first sight, it seems that some of the earliest cases of prefinite *es* occur in translations of Latin V1-clauses. However, due to the small number of relevant examples, we have been unable to check whether this is a significant correlation.

21 The *es*-clause is directly preceded by the following passage:

- (i) *Er sprach “ich chun=de iv ein michel vroode. div chvnfet=ich ist. aller*
 he spoke I proclaim you a great joy which coming is all

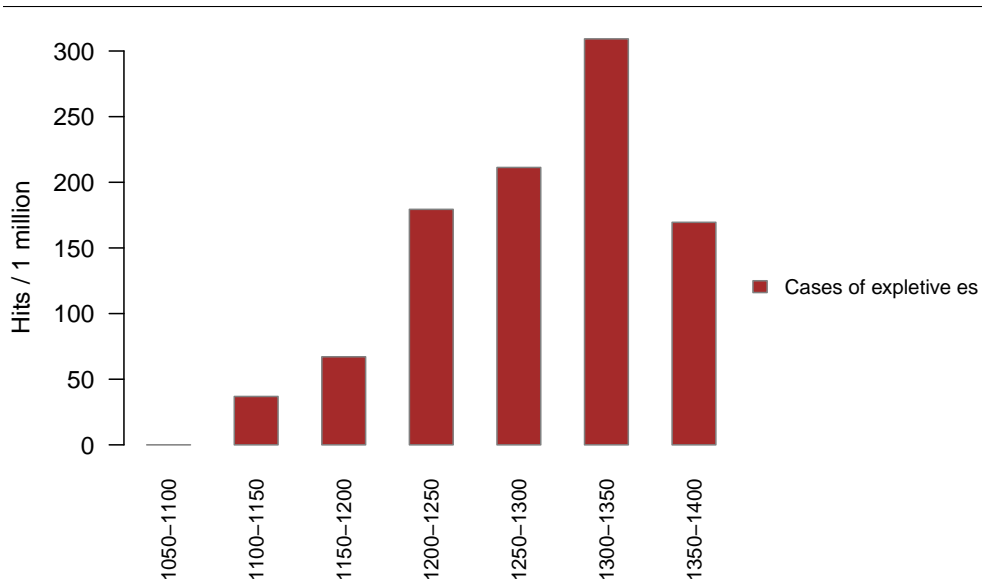


Figure 3 Cases of *Vorfeld-es* over time: normalized frequencies

- (27) (a) *iz enwiderrete nieman*
 it NEG-prottested nobody
 ‘Nobody protested.’
 (Reinhart Fuchs (late 12th cent.), 1437)
- (b) *iz enwart nie niehein keiser sô hêre geboren an*
 it NEG-was never not-one emperor so here born on
der erde
 the earth
 ‘Never before has such a great emperor been born on earth.’
 (Rolandslied (around 1170), 1592)
- (c) *Ez leit der vischære von armuot grôze swære.*
 it suffered the fisherman from poverty big grave
 ‘The fisherman suffered from great poverty.’
 (Gregorius (late 12th cent.), 1201)

der werlt.
 the world

‘He said: ‘I proclaim a great joy to you that is coming to the whole world.’’

This finding shows that expletive uses of *es* evolved earlier than estimated by previous work. It seems that *es* began competing with expletive uses of light frame adverbials as early as the 12th century onwards. In other words, it is perhaps the case that the chronological gap between the emergence of *es* and the consolidation of the V2 property is not as large as suggested earlier, which reopens the possibility that there is a closer connection between these two changes (see section 7 for additional discussion).

4.2 Definiteness of the subject

Since it is a well-known fact that CP expletives (and expletives more generally) tend to co-occur with rhematic, non-definite subjects (Vikner 1995, and more recently Booth 2018 on Icelandic), it comes as no surprise that the majority of our cases (271/444, 61%) exhibit an indefinite subject as in (27a,b). This tendency is particularly clear in connection with the indefinite *alles* ‘all, everything’. In our sample, there are 38 cases where prefinite *es* combines with a lower nominative indefinite pronoun *alles* ‘all’ (all in all, there are only two examples where *alles* appears in clause-initial position, both from the first half of the 14th century):

- (28) *Iz was allez uerloren*
it was all lost
‘All was lost’ (12:2; Pfafe Konrad: ‘Rolandslied’ (A), 0a,3316)

Moreover, examples like (28) may have also played a role in the historical development of the *Vorfeld-es* in that they provide another potential bridging context for a reanalysis producing a CP expletive in addition to the reinterpretation of cataphoric *es*. Upon closer inspection, it turns out that in MHG *allez* is ambiguous between an indefinite pronoun (nom/acc 3sg neut.) ‘everything’, a quantifier ‘all’, and an adverb meaning ‘all, fully, entirely, completely, wholly’ (for the historical development of ‘all’ in German cf. Roehrs & Sapp 2016: 123–153). In the examples we counted as instances of expletive *es*, *allez* is invariably tagged as an indefinite pronoun in ReM, but still, many of the cases are ambiguous. This can be illustrated with the example in (28): if *allez* is analyzed as an adverb, the initial *es* is arguably an argument (a referential subject, giving rise to the reading ‘It was all/completely lost.’); if *allez* is taken to be an indefinite subject pronoun, *es* must be an expletive.²²

²² Traces of this ambiguity still exist in present-day German. In relevant examples, the status of *es* is still somewhat unclear. This can be seen from the fact that *es* may optionally occur in embedded clauses together with *alles*:

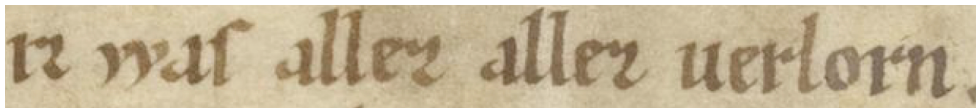


Figure 4 Double *allez* in Cod. Pal. germ. 112, p. 45r

An instructive piece of evidence in support of the idea that clauses with *allez* contributed to the development of *Vorfeld-es* comes from the manuscript (P) of the *Song of Roland* that resides in the library of the University of Heidelberg (Cod. Pal. germ. 112). In the original manuscript, there are actually two instances of *allez* in the clause already mentioned above as (28), whereas one occurrence of *allez* has apparently been deleted in the annotated version in ReM, which is based on [Wesle \(1928\)](#), an influential and wide-spread edition of the *Song of Roland*.

If the double *allez* found in the manuscript is not treated as a scribal error, the example clearly shows an early instance of expletive *es*, since one instance of *allez* has to be analyzed as an indefinite subject, while the other is adverbial, giving rise to the reading ‘Everything was completely/totally lost’. Moreover, the sentence is testimony to the ambiguous status of *allez* in early German, which provides a pathway to the reanalysis of a fronted neuter singular personal pronoun as a CP expletive.

The above considerations suggest the possibility of an earlier reanalysis of relevant bridging contexts in the OHG period, where similar patterns with *al/allaz* ‘all’ occur; compare the following examples taken from *Otfrid*:²³

- (i) *dass (es) alles verlore[n] ist*
 that it ALLES new is
 a. ‘that all is new’
 b. ‘that it is all new’

²³ [Pfenninger \(2009: 133, 149\)](#) argues that examples such as (i) and (ii) represent early expletive uses of *iz*. However, note that in both cases the status of the clause-initial neuter singular pronoun is not entirely clear.

- (i) *Íz habet beide namen ab estuando táz chit fóne zéssône uuánda sô*
 it has both names ab estuando that means from estuary since so
accessus maris uuírdet.
 accessus maris becomes

‘Both names contain *ab estuando*, which means ‘from estuary’, since *accessus maris* [access to the sea] is available.’

(Notker, Boethius IV/V; [Sehrt & Starck 1933: 325, 15–20](#))

On the historical development of pronouns referring to situations

- (29) (a) *iz ist gifúagit al in éin selp so hélphantes béin*
it is set all together similar so elephant's bone/leg
'All is made so well-proportioned as ivory' (Otfrid I,1, 16)
- (b) *Iz ward állaz io sár, sosø er iz gibót*
it became all always immediately as he it ordered
thar
there
'All happened always immediately as he ordered it.'
(Otfrid, II,1, 39)

Again, these considerations suggest that expletive uses of *iz/ez* are perhaps of greater antiquity than previously assumed. In what follows, we now turn to consider two extra-linguistic factors that influence the distribution of expletive uses of *es* in our sample, namely dialect region and text type/genre.

4.3 Dialect region

Linguistic innovations are usually not evenly distributed over dialect areas. Early occurrences of a change are typically confined to a certain dialect or dialect area before the new feature or property gradually spreads to other speaker communities. As a result, we can usually identify a (dialectal/geographical) center where the change is robustly and systematically attested, while its effects become dissipated over distance when the change is subject to areal diffusion. In the case of expletive *es*, its areal/dialectal distribution in our data sample might tell us something about its origin and subsequent diffusion over various dialects. Figure 5 shows the frequency (absolute numbers) of Vorfeld-*es* across dialect regions in our data sample taken from ReM.²⁴

The vast majority of all cases of Vorfeld-*es* comes from the Upper German area, including 311 unambiguous cases. In contrast, there are only 71 cases

-
- (ii) *Iz spríchit ouh giwáro Hierónimus ther máro, giwuag er wórtes*
it speaks also emphatically Jerome the famous mentioned he words
sines thes selben álten nides.
his the same old enviousness
'Jerome, the famous, also points (this) out emphatically, he mentioned in his
writing the same old enviousness.'
(Otfrid, 5.25, 69)

²⁴ ReM also contains more detailed information about dialectal provenance such as South Bavarian, East Franconian etc. However, since the inclusion of a large number of individual dialects would have led to a scattered and less meaningful result, we decided to focus on larger dialect regions here (see below for some remarks that pay attention to more fine-grained dialectal distinctions). Furthermore, note that in quite a number of cases, the exact dialect region/type cannot be determined.

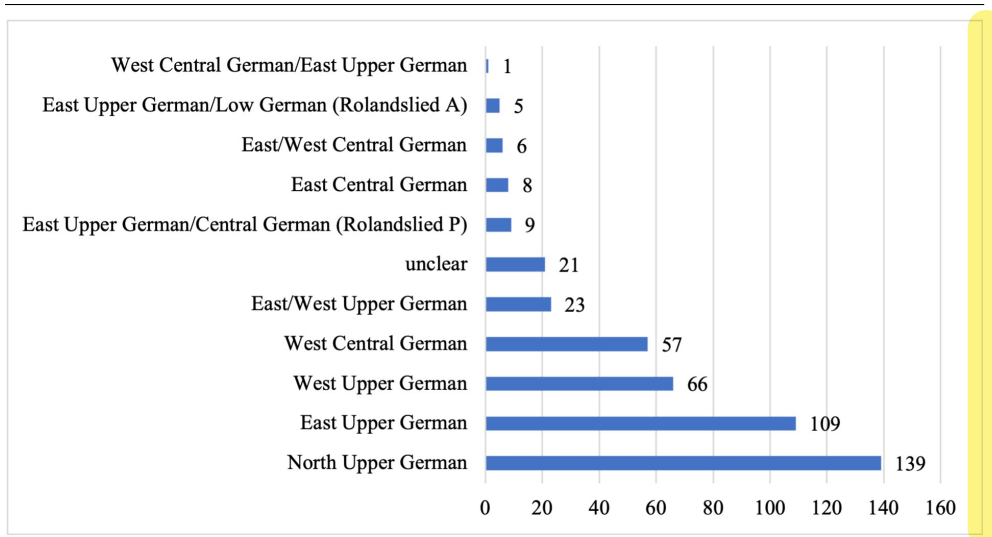


Figure 5 Cases of Vorfeld-*es* and dialect region

that are clearly of Central German provenance (in 62 cases, the origin is either unclear, or we find a mixture of dialect features). This distribution seems to suggest that the expletive use of *es* is an (North) Upper German innovation. However, it is also possible that the uneven distribution merely reflects the make-up of ReM, which contains more Upper German than Central German texts. Moreover, we must pay attention to the possibility that the varying frequency of prefinite *es* across dialects could be the result of other factors such as time or text type – for instance, we already know that most relevant examples come from late MHG. Finally, we should look closer at the dialectal affiliation of the examples dating from the 12th century, since the early cases are of particular interest if we want to learn more about the historical origin of the expletive use of *es*. In the following, we will discuss these points one by one, starting with the dialectal provenance of the early cases. Figure 6 displays the distribution of the 12th century examples over dialect regions.

It becomes clear that by far the most relevant examples come from East Upper German.²⁵ However, one might argue that this distribution is merely a consequence of the strong Upper German bias in the early sections of ReM

²⁵ This observation is somewhat unexpected since many present-day Bavarian dialects shun the use of *es* as a CP expletive (cf. Mayerthaler & Mayerthaler 1990, Weiß 1998, see also section 4.6).

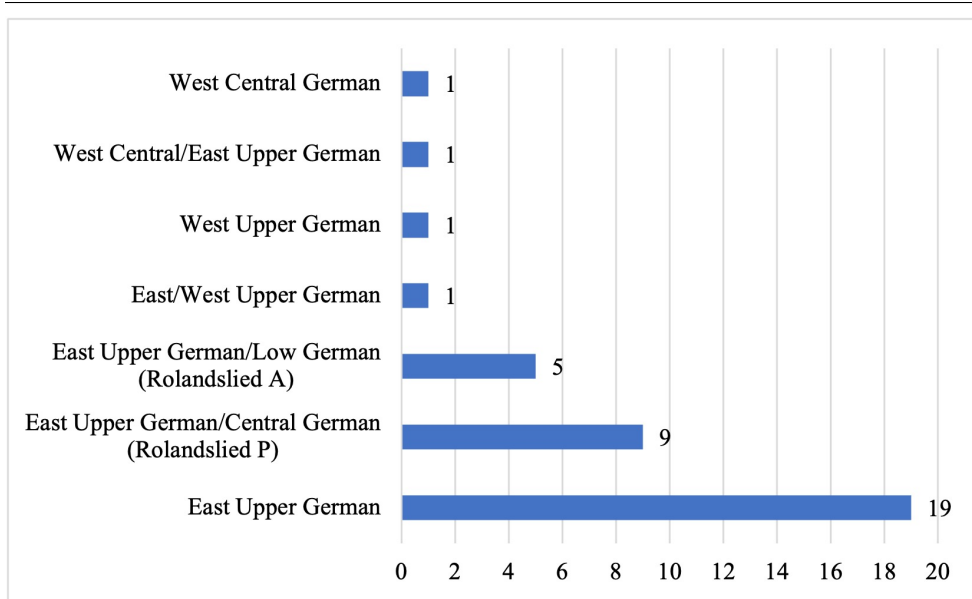


Figure 6 Vorfeld-*es* – dialectal origin of early cases (12th century)

(more than 80% of the total quantity of text is of Upper German origin, compare Table 2).²⁶

Still, the fact that only a single instance of the early examples²⁷ is not classifiable as Upper German suggests that the expletive use of *es* originated in the

26 The overview in Table 2 is based on the relevant information on text and token numbers for all early (i.e., 11th and 12th century) subcorpora in ReM. Note that the label “mixed/unclear” refers to subcorpora such as “11-12_1-obd-PV-X” which contain both East and West Upper German texts. There is also a small number of early Central German texts that exhibit some Low German features, or collections that include some Low German fragments (see the documentation for ReM for further details: <https://www.linguistics.rub.de/rem/corpus/details.html>). Note that the numbers given for East Upper German include the versions (A) and (P) of the *Song of Roland*, which also show some Low German traits.

27 The relevant West Central German example appears in the *Arnsteiner Marienlied*:

- (i) *iz ne mogen alle zungen gesagen nog gesingen, frouwe, diner*
 it not may all tongues say nor sing woman YOUR.GEN
eren nog dines loves ervollen.
 glory.GEN nor YOUR.GEN praise.GEN truly

‘All tongues can neither truly tell nor sing, woman, your glory and your praise.’

(*Arnsteiner Marienlied*, 12_2-wmd-PV-G > M136-G1 (tok_dipl 526 – 536))

Dialect region	Number of texts	Number of tokens
Upper German		
East	62	424,884
West	15	40,287
mixed/unclear	65	132,199
Total	142	597,370
Central German		
East	8	2,990
West	26	49,078
mixed/unclear	10	60,661
Total	44	112,729

Table 2 Dialectal makeup of early (11th–12th century) texts in ReM

southern part of the German dialect continuum, most likely in the East Upper German area. This conclusion is corroborated if we take a look at the normalized frequencies (hits per million words) in Figure 7 (focusing on cases where the dialectal classification is clear).²⁸

Further support for this proposal comes from the fact that the two earliest examples (from the first half of the 12th century) are classified as East Upper German in ReM²⁹ and from the following overview of the dialectal classification of the 23 texts that contain at least 5 instances of *Vorfeld-es* (see also section 4.4 below), see Table 3.³⁰

Again, we can see that the vast majority of relevant texts comes from the

28 A Pearson's chi squared test reveals that the influence of the factor dialect region on the distribution of early cases of *Vorfeld-es* is highly significant (chi-squared = 58.514, df = 2, p < 0.001).

29 The first of these displays an extraposed subject (cf. (26) above); in the second example (i), prefinite *iz* 'it' introduces a clause with a lower indefinite subject (*allez* 'all') in a predicative construction. As already discussed in section 4.2, examples such as (i) are actually ambiguous, since *iz* could either be interpreted as the subject of the clause, or a CP expletive.

(i) *Iz was hiephor allez ein genade.*
 it was here for all.NOM a mercy/blessing
 'Therefore, all was a blessing.'
 (*Predigtfragmente* (M/G T 43), 12_2-bair-P-X > M178-N1 (tok_dipl 681 – 691))

30 As already noted above (e. g. in fn. 26), some texts show conflicting dialectal features. In Table 3, the column "dialect region" lists the generally accepted areal classification, while additional dialectal influences are given in parentheses.

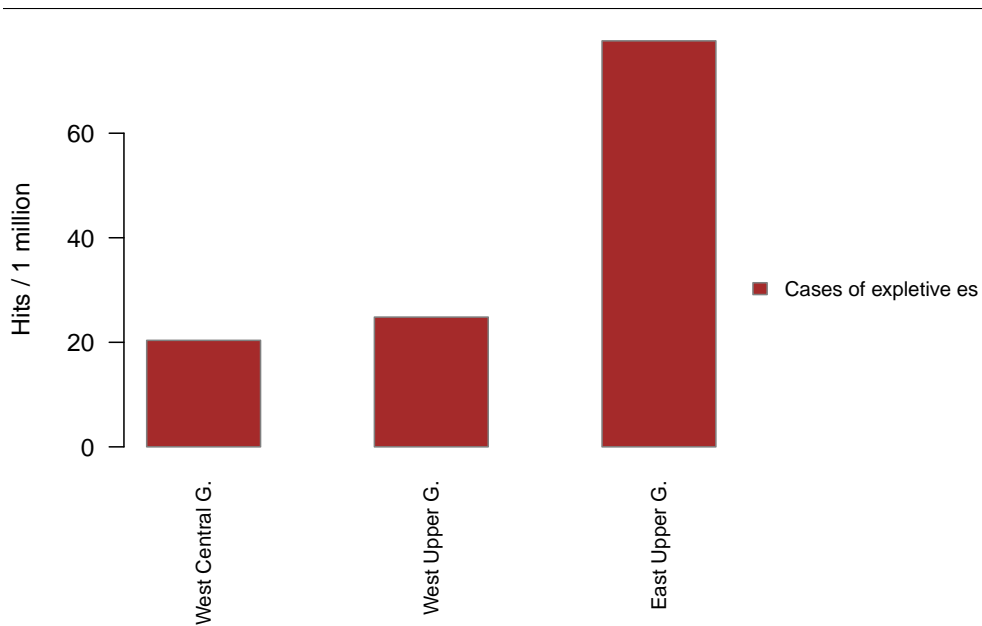


Figure 7 Early cases (12th c.) of Vorfeld-*es* over dialect regions: normalized frequencies

Upper German area. Among the 23 texts, there are only four that are of Central German origin. Within Upper German, there is a clear bias towards the east: of the 18 Upper German texts, 14 belong to the North/East Upper German dialect region. Furthermore, it turns out that three of the four texts with the largest number of occurrences of Vorfeld-*es* are from the North Upper German area. At first sight, this might be taken to suggest that the expletive use of *es* is particularly wide-spread in this dialect region. However, upon closer inspection, it appears that the frequent use of Vorfeld-*es* might also be attributed to some other factors. First of all, note that all of the relevant texts are of late MHG origin (mostly from the first half of the 14th c., labeled here 14:1), where the use of Vorfeld-*es* seems to be already quite firmly established. Second, and perhaps more important, observe that five out of six texts with the highest number of Vorfeld-*es* are of a special type, namely various sorts of legal documents (e. g. codes of law). This finding implies that the use of *es* as a prefield filler is also influenced by genre/text type. This suggestion is discussed in some more detail in the next section.

Text	Time	Dialect region	Cases of <i>Vorfeld-es</i>
Nürnberger Stadtbuch	14:1	North Upper German	44
Nürnberger Satzungsbuch	14:1	North Upper German	38
Würzburger Polizeisätze	14:1	North Upper German	19
Engelthaler Schwesternbuch	14:1	North Upper German	10
Liet von Troye	14:1	North Upper German (Central German)	28
Kaiserchronik A	12:2	East Upper German	6
Rolandslied (P)	12:2	East Upper German (Central German)	9
Rolandslied (A)	12:2	East Upper German (Low German)	5
Iwein	13:1	East Upper German	8
Nibelungenlied	13:1	East Upper German	8
Dietrichs Flucht	13:2	East Upper German	14
Frauendienst	13:2	East Upper German	12
Freisinger Rechtsbuch	14:1	East Upper German	23
Oberaltaicher Evangelistar	14:1	East Upper German	13
Augsburger Stadtbuch	13:2	West Upper German	30
Schwabenspiegel	13:2	West Upper German	7
Schwarzwälder Predigten	13:2	West Upper German	7
Nikolaus von Straßburg	14:2	West Upper German	5
Rheinisches Marienlob	13:1	West Central German	13
Freidank: Bescheidenheit	13:2	West Central German	5
Die Erlösung	14:1	West Central German	7
Straßburger Alexander	13:1	East Central German	5
König Rother	13:1	unclear	9

Table 3 Dialectal classification of texts with at least 5 cases of *Vorfeld-es*

4.4 Genre

Another extra-linguistic factor that influences the distribution of *Vorfeld-es* in our dataset is text type/genre. Roughly 40% (170/445 cases, 38.2%) of all instances of *Vorfeld-es* appear in legal texts (codes of law etc.), which is somewhat surprising, because legal texts constitute only a minor portion of the overall corpus. *Vorfeld-es* is especially frequent in certain legal statements such as requirements, prohibitions and commandments. Some relevant examples are given in (30).

On the historical development of pronouns referring to situations

- (30) (a) *Ez sol auch niemen chein silber verkauffen in der*
 it should also nobody no silver sell in the
Stat.
 city
 ‘Nobody should sell silver in the city.’
 (13,2; *Augsburger Stadtbuch*, 15rb,21–22)
- (b) *Ez sol auch ain ieclich pecke alle tage nev pachen*
 it should also an each baker all days new baked
prot veil haben
 bread for-sale have
 ‘Each baker should have new bread for sale every day.’
 (14,1; *Nürnbergger Stadtbuch*, 2va,8–9)
- (c) *Ez sint verboten lose semeln [...]*
 it are prohibited loose rolls
 ‘Loose rolls are prohibited [...].’
 (14,1; *Nürnbergger Stadtbuch*, 2va,10–11)

These statements are typically temporally and situationally independent and are not linked to the preceding discourse. The influence of text type/genre becomes particularly clear if we calculate the frequency of *Vorfeld-es* relative to text size, that is token numbers. The results are shown in Figure 8.³¹

The graph gives you the normalized frequencies of *Vorfeld-es* in the texts we considered. Expletive uses of *es* are most frequently found in the five texts at the bottom of the graph. Crucially, all of these are legal texts (statute books, codes of law, mostly from the early 14th century).³² In contrast, ex-

31 Note that we considered only texts which exhibited at least five instances of prefinite expletive *es*.

32 An anonymous referee drew our attention to the fact that the *Schwabenspiegel*, which is considered one of the oldest legal texts in German, shows a lower frequency of prefinite *es* than the later legal texts. This difference can perhaps be attributed to the fact that *Schwabenspiegel* deals with a distinct set of legal issues (land ownership and feudal law vs. rules and commandments governing communal life in a medieval city), which seems to affect the choice of linguistic forms that are used. In particular, relevant legal statements are often phrased by using conditional clauses (in the form of free relatives) as in (i). However, in commandments like (ii) we also find the *Vorfeld-es* similar to the later texts.

- (i) *Swer gewette oder buoze niut gît ze rechten tagen der vrônebote*
 whoever court money or fine not gives to right days the
sol in pfenden.
 bailiff should him impound
 ‘Whoever does not pay court money and fines in time should have their assets seized by the bailiff.’
 (13:2, *Schwabenspiegel*; M339-G1, 41vb, 14–17)

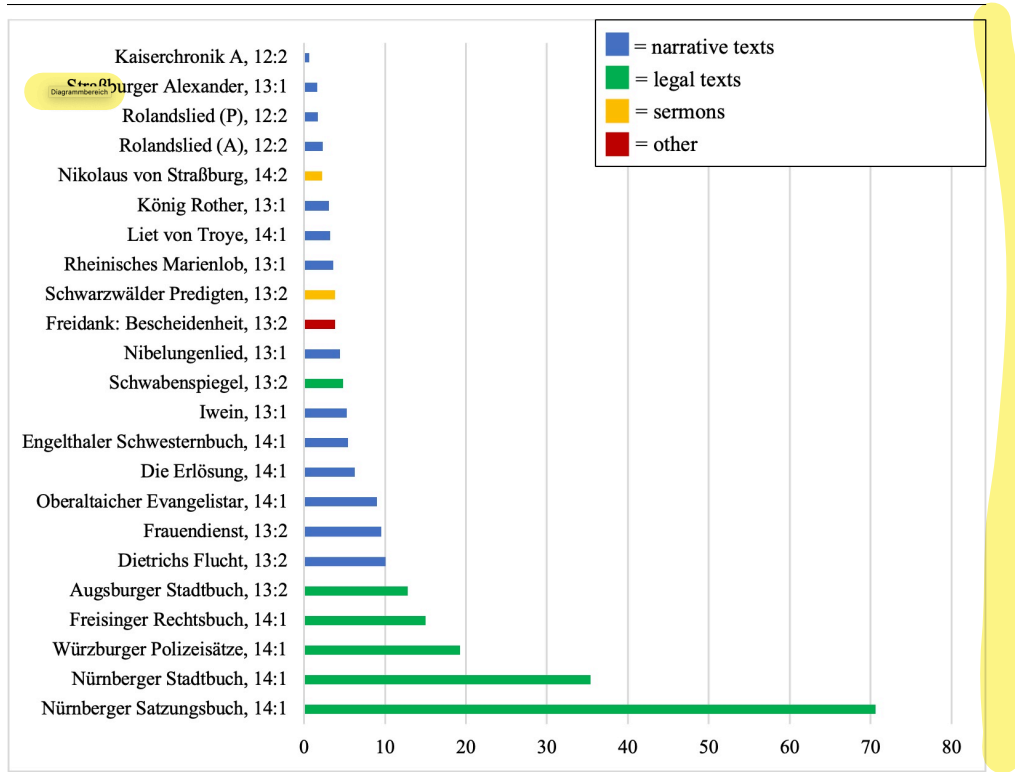


Figure 8 Vorfeld-es/10,000 words (ReM)

pletive *es* seems to be quite rare in narrative texts.³³ Moreover, it is perhaps noteworthy that roughly one half of the early texts were adapted from Old French/Franco-Provençal, in some cases possibly via Latin (12:2: *Rolandslied*; 13:1: *Iwein*, *Straßburger Alexander*; of the 37 cases of VF-*es* in 12th century texts, a large portion (14 cases) is from two versions (A and P) of the *Rolandslied*).

Finally let us take a look at the distribution of Vorfeld-*es* in comparison with its possible precursor, that is, clause-initial *dô* (< OHG *thô*; Figure 9). A

- (ii) *ez sol dechein man vüre sînen hêrren pfenden dulten.*
 it should no man for his master pledge.ACC bear
 'No man should have his assets seized to pay for his master's debts.'
 (13:2, Schwabenspiegel; M339-G1, 42rb, 2–4)

33 A noteworthy exception is *Iwein*, which is a rather early text (around 1200), but still exhibits a share of prefinite *es* which is only surpassed by later texts/texts from other genres.

first rough comparison of the absolute numbers suggests that the distribution of *dô* displays the mirror image of the distribution of expletive *es*. Thus, it appears that pre-finite *dô* is frequently used in narrative texts, while it is close to absent in legal texts.^{34,35}

4.5 Preliminary conclusions

This section has demonstrated that new evidence made available by electronic corpora may shed new light on old problems. In particular, our findings call for an adjustment of the traditional view, according to which the *Vorfeld-es* emerged quite late in 13th/14th century MHG. While it is true that the majority of relevant cases shows up in mid/late MHG, there is a significant number of earlier cases dating to the 12th century, which suggests that the relevant change started at least around 100 years earlier. In addition, we have seen that expletive uses of *es* are more likely to occur in sentences with an indefinite subject, as expected. However, a closer look at examples containing the indefinite *allez* has led us to propose that at least a subset of these cases provided an additional bridging context for the rise of *Vorfeld-es* due to the fact that *allez* is ambiguous between a nominative indefinite pronoun and an adverbial. We then also looked at the distribution of *Vorfeld-es* across dialect regions. While the evidence from our sample is not entirely conclusive, the data available suggest that the expletive use of *es* is an innovation linked to the East Upper German area. The fourth and final factor we investigated was genre/text type. It became clear that *Vorfeld-es* is particularly frequent in legal texts, while it is relatively rare in narrative text types. This finding is in line with the assumption that the *Vorfeld-es* is typically used in clauses that are temporally independent (i.e., not bound to the previous discourse con-

34 The numbers given for *dô* in Figure 9 refer to all cases where *dô* appears in clause-initial position (directly preceding the finite verb); in particular, no distinction is made between adverbial and expletive uses of *dô* (telling apart the various functions of initial *dô* is a difficult task, which we hope to advance in future work).

35 There is only a single case in the *Nürnberger Stadtbuch*, but here, *dô* does not seem to be a text-continuative marker, but rather a locative introducing an existential statement:

- (i) *wer daz brichet der gibet ie von dem pâr schuohe ij. schillingn.*
who that breaks the-one gives each of the pair shoes ij Shillings
dô sîn meister über gesetzet di daz besehen unde rüegen
then/there are masters over set who that check and punish
sulen.
should

'He who breaks that (rule) gives two shillings for each pair of shoes. There are masters in charge who should check and punish that.'

(14,1; *Nürnberger Stadtbuch*, 8va,21–25)

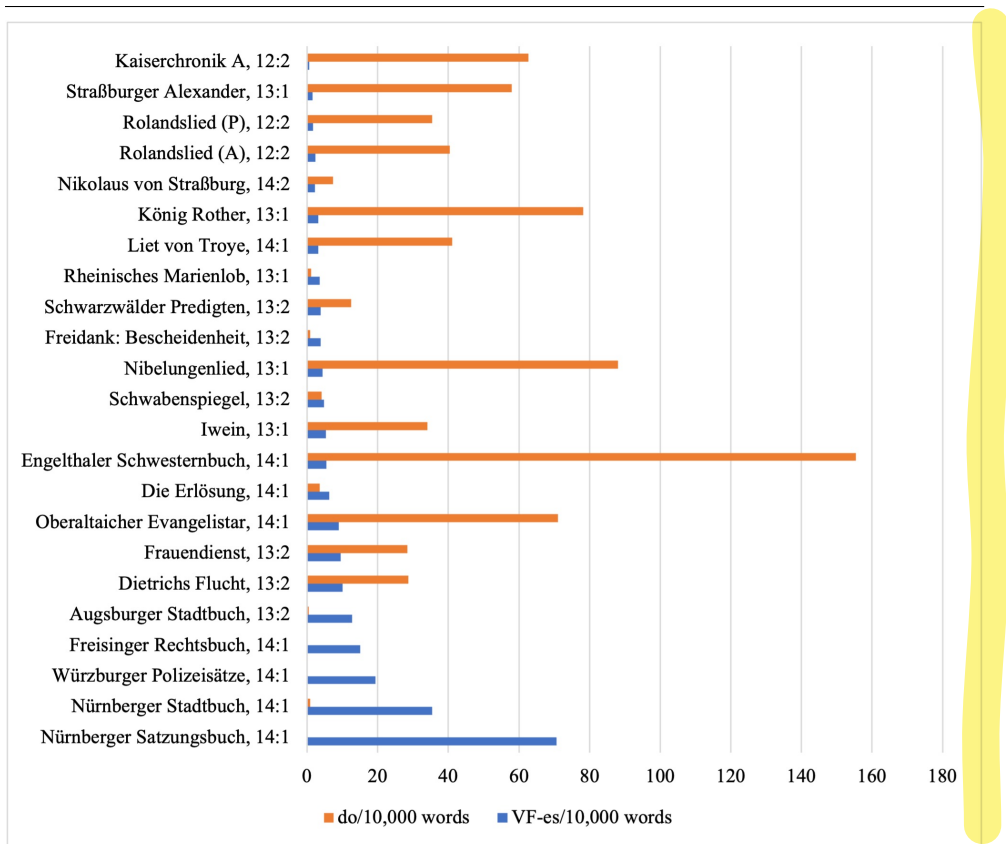


Figure 9 Prefinite *es* vs. prefinite *dô*/10,000 words

text) and/or introduce a new tense setting/situation. In contrast, first results show that the light frame adverbial *dô*, possibly the precursor of *es* in its expletive function, is frequently used in narrative texts, but rare in legal texts (and treatises). Again, this is expected if *dô*, apart from contexts where it seems to assume the function of an CP expletive, is still primarily used as a discourse-continuative marker that links its clause to a tense interval that has been established in the previous discourse.

4.6 Why is *es* a 'better' expletive than *dô*?

The above observations suggest some new, admittedly still rather speculative answers to the question why *es* replaced expletive *dô* in the course of the

MHG/ENHG periods. What we would like to propose is that the rise of the Vorfeld-*es* was promoted by a conspiracy of linguistic and extralinguistic factors. The gist of the linguistic part of our proposal is that *es* is better matched for introducingthetic sentences and new, temporally independent situations because it is less burdened with anaphoric content. In contrast, *dô/da* has never entirely lost its anaphoric functions. Recall that OHG *thô* can always be linked to an adverbial meaning. In MHG, *dô/da* ‘there, then’ continues to be used as a temporal/spatial anaphor that refers back to a previously mentioned time/place as shown in (31).

- (31) *dô disiu rede was getân, dô sprach aber der guote*
when this speech was made then spoke however the noble
man
man

‘When these things had been said, then the noble man spoke.’

(Parzival 457,1; Paul ²⁵2007: 414)

The adverbial character of *dô/da* is preserved in present-day German (PDG); even in cases where *da* is used to introducethetic sentences in out-of-the-blue contexts such as (32), it still conveys some form of anaphoric reference to a situationally given place or time (‘at this point/place/time’):

- (32) (Was ist passiert? ‘What happened?’)
Da hat eine Ministerin die Staatsanwaltschaft eingeschaltet.
da has a minister the prosecution involved

‘A minister got the prosecution involved.’

(DeReKo, PBW/W12.00069 Protokoll der Sitzung des Parlaments
Landtag von Baden-Württemberg am 15.07.1999.)

However, note that PDG *da* is much less felicitous in ‘pure’ out-of-blue contexts at the very beginning of a text or discourse. In contrast, *es* is a heavily underspecified element and therefore much more versatile in its uses. It is also commonly used in other non-referential contexts (as a quasi-argument, or cataphoric pronoun) and thus is more suitable for introducingthetic sentences including ‘pure’ out-of-the-blue contexts.³⁶ However, this cannot be the whole story, since Vorfeld-*es* is still only rarely used or even absent in some present-day dialects (cf. e. g. Mayerthaler & Mayerthaler 1990, Weiß 1998: 102, Bayer & Suchsland 1998 on Bavarian). In the following examples from Bavarian (an impersonal passive (33 a) and a presentational sentence

³⁶ A similar development can be observed in Scandinavian, where in many varieties *det/það* has replaced a competing locative element (cf. e. g. Booth 2018 on Icelandic).

in (33b)) no *Vorfeld-es* is used. Alternative strategies to fill the clause-initial position include fronting of a non-finite verb (as in the impersonal passive in (33a)) and the by now familiar *do* which may still be used as a functional equivalent to *Vorfeld-es* in these dialects.

- (33) (a) *Tanzt ist worn.*
 danced is been
 'It has been danced.'
- (b) *Do is a Ungligg bassierd.*
 DO is an accident happened
 'An accident has happened.' (Weiß 1998: 102)

To account for these observations, one might assume that the rise of the *Vorfeld-es* is primarily a development that took place in written registers (which only later turned into an oral variety, giving rise to present-day Standard German). This suggests the following trajectory for the rise of the *Vorfeld-es*: in MHG, *Vorfeld-es* became popular as a means to introduce certain legal statements (non-narrative texts), which were typically produced by the highly influential medieval chanceries. Later on, when the language use of the chanceries became a model for written German in the ENHG period, the use of the *Vorfeld-es* spread to other (i.e., narrative) text types. This development is presumably part of a larger change that affected the organization of written (narrative) texts, leading to a general tendency to explicitly mark discourse relations and textual cohesion by lexical means in the left clausal periphery.

5 TOWARDS AN ANALYSIS: ON THE DISCOURSE FUNCTION OF (CP) EXPLETIVES

In the following three sections, we will outline a theoretical account of anchoring statements to the context, discuss the role of *es* in this process and explain the syntactic and semantic underpinnings of the versatile nature of *es* that have enabled it to replace its competitor *thô/dô* 'then' in most environments.

We will argue that *es* is a weak demonstrative pronoun. Furthermore, we will distinguish two types of *es* and argue that a) correlate *es* is base-generated within the CP of the dependent clause and is in complementary distribution with the strong demonstrative pronoun *das* 'that' and b) that subject expletive *es* and *Vorfeld* ('prefield') expletive *es* are both base-generated in [Spec,TP], but differ in their argument status. Sentences containing subject expletive *es* by the nature of the predicate constitutethetic judgements. There is a strong

connection between subject expletive *es* and Vorfeld expletive *es* since the latter indicates that a sentence that can also be anchored as a categorial judgment constitutes athetic judgment. This functional relation is captured in the present account in that both elements are base-generated in the same syntactic position.

From the discussion of the historical data, it is clear that the rise of the Vorfeld-*es* is indirectly linked to the generalization of the V2-rule (cf. among others Axel 2009). The traditional explanation has it that the head that the finite verb targets in the C-domain is endowed with a generalized EPP-feature, requiring – in the case an apt element for discourse linking is missing – the insertion of an expletive element in its Specifier (Besten 1983, Tomaselli 1990).

However, the standard account of the V2 property in terms of an EPP-feature has been superseded by an alternative explanation in which the finite verb may appear in different positions in the C-domain followed by movement of maximally one clause-internal element due to the bottleneck effect in the lowest C-head, namely FinP (cf. Haegeman 1996, Roberts 2004, Benincà 2006, Salvesen 2013, Holmberg 2015, Wolfe 2016). Thus, we are left with the expletive element *es* for which an independent motivation of its presence in the C-domain is still lacking.

The present paper argues that *es* is not semantically vacuous, but serves to anchor the utterance as athetic statement. For that matter, we propose that V2 can be reinterpreted as a rule in which the finite verb follows an explicit element that anchors the utterance to the context (cf. Hinterhölzl 2019). This anchor can be an individual topic or *es*, a situation topic, as we will show below. The latter, we argue, links the utterance back to the utterance situation and typically marks Tense as being used non-anaphorically, as will be demonstrated in detail in the following section.

Since we will argue below that *es* is a demonstrative element with a weak definite reading that binds the situation argument of Tense or the situation argument of the embedded CP in case of correlate-*es*, we will introduce the distinction between weak and strong definite determiners in the following section.

5.1 *Weak and strong definite determiners in German*

Definite DPs in Germanic languages seem to obey two slightly different usage conditions. In the first instance, they are used in environments in which there is no discourse antecedent and the definite expression picks out an individual with a unique property, as is illustrated in (34). In the second instance, they are used to pick out an individual that has been introduced in the previous discourse, as is illustrated in (35). Note that the uniqueness property is

neither a sufficient nor a necessary condition for the anaphoric use of the definite determiner, given that there may or may not be other men in the room in the situation described in (35). For further discussion see [Hartmann \(1982\)](#), [Himmelman \(1997\)](#) and [Schwarz \(2009\)](#). Following [Donnellan \(1966\)](#), we will refer to cases like in (34) as the attributive use and to cases like (35) as the referential use of the definite determiner.

(34) (out of the blue): The sun is shining today.

(35) A man and a woman came into the room. The man wore a green hat.

There is evidence that these two uses of the definite article are based on a distinction in grammar. Several Germanic languages / dialects have long been known to have two full article paradigms (cf. [Heinrichs 1954](#) for the Rhineland dialects, [Scheutz 1988](#) for Bavarian, [Studler 2011](#) for Swiss German, and [Ebert 1971](#) for the Frisian dialect of Fering). In Standard German, the distinction becomes apparent in certain preposition-article combinations, as is illustrated in (36).

- (36) (a) *Hans ging ins Haus.* (D-weak)
 Hans went into=the house
 (b) *Hans ging in das Haus.* (D-strong)
 Hans went into the house
 ‘John went into the house’

Interestingly, these morphological differences correspond to syntactic differences: while a referentially used DP is typically de-accented and scrambled to a high position in the middle field in German, an attributively used DP receives an accent and is licensed in a lower position in the middle field, as is illustrated in (37). In (37), the constituent receiving main accent is indicated with bold letters. The direct object in (37a) is de-accented and preferably realized in a position above the frequency adverb. The nominal content, as we will argue below, is taken to be presupposed, leading to the identification of the scrambled DP with its discourse antecedent (*small house* = an old shack), thus giving rise to the interpretation that she not only bought a small house (far away from a city) but also that this house needs to be renovated. In (37b), accentuation of the direct object indicates that a new discourse referent is introduced implying that the little house in the countryside has a garden containing – as many country houses do – a garden shed that she wants to remove.

- (37) (a) *Maria hat ein kleines Häuschen am Land*
 Maria has a little house at-the countryside
gekauft. Nächste Woche will sie die alte Hütte
 bought. next week wants she the old hut
sofort abreißen.
 immediately tear-down
- (b) *Maria hat ein kleines Häuschen am Land gekauft. Nächste Woche will sie sofort die alte **Hütte** abreißen.*
 ‘Mary bought a little house in the countryside. Next week she will immediately tear down the old hut.’

As far as the attributive use in (37b) is concerned, two interpretations of this reading are possible: a) the fact that a new discourse referent is introduced is due to the semantics of the weak definite determiner which is then reflected syntactically in the lower position (possibly the base position in the vP) and the accentuation of the direct object; b) the fact that a new discourse referent is introduced is not due to the semantics of the weak definite determiner, but comes about by the accentuation of the direct object in (37b). There is evidence that the second interpretation is correct. Schwarz (2012) shows that strong determiners can also introduce a discourse-new element in certain bridging contexts (the reader is referred to Schwarz 2012 for the details). In these cases the nominal predicate is also accented. Moreover, *es* (like all non-focused pronouns) is always deaccented and can denote a new and a given discourse situation, as we will see below.

Thus, we will pursue here the latter approach. In particular, we assume that there is a division of labor between the semantics of the definite determiner and the (de-)accentuation of its nominal complement, with (de-)accentuation indicating that the respective individual is either given or new in the discourse D , with $D \subset CG$ (common ground).

In this paper, we follow Higginbotham & Ramchand (1997) who argue that all predicates, including nominals and adjectives, have an event or situation argument. Maienborn (2007) elaborates a finer-grained ontology of event categories, but the differences are not important for our purposes. In particular, we assume that all nominals have a situation argument and express a relation between an individual and a situation, as indicated in (38).

- (38) $\text{man}(x) := \text{man}(x, s)$

The definite determiner takes this relation and returns the unique individual that satisfies the nominal predicate in situation s . The weak determiner presupposes that the situation argument is identifiable in the CG and asserts that

there is a unique individual identifiable in this situation. This individual may be given or constitute a new discourse referent, depending on the accentuation of the nominal predicate. With the strong determiner, both the situation argument and the individual argument are presupposed to be identifiable in the CG. In particular, if the nominal predicate is de-accentuated, the referential determiner picks up an individual that is given in the discourse D and corresponds to the presuppositional content in the given situation.

Hence the difference between the weak and the strong determiner can be expressed formally as given in (39). In (39) conditions that are used as presuppositions are given before the dot of the lambda-operator, while conditions that are asserted are given after the dot. As can be seen from the definitions, the determiner is indifferent with respect to the discourse-giveness of the individual it denotes, requiring only that the respective referent is identifiable in the common ground (CG).

- (39) (a) $[[D]] = \lambda P \exists s s \text{ in CG} \cdot \iota x P(x,s)$ (weak reading)
 (b) $[[D]] = \lambda P \exists s s \text{ in CG} \ \& \ \iota x \text{ in CG} \ \& \ P(x,s) \cdot x$ (strong reading)

In this account, the attributive use comes about by combining the weak definite determiner with an accented nominal, while the referential use comes about by combining the strong definite determiner with a de-accented nominal.

In Section 6.3 below, we will argue that *es* and *das* are the weak and strong versions of a demonstrative element that binds a situation argument. In particular, we will propose that the attributive and the referential reading of (subject) expletive *es* is determined by the aspectual and *Aktionsart* properties of the finite verb, while the interpretation of correlate *es* as introducing a new discourse referent comes about as Q-based implicature via the non-use of the strong determiner that only exhibits the discourse anaphoric reading, as we will see. But before that we would like to talk about the ways clauses can be anchored to the context and the role that the reference situation plays in this process in the following section.

5.2 Anchoring to the context: the role of the reference situation

It is generally assumed that the clause is anchored by tense (and mood) to the context. Tense in this conception has the role of temporally situating the event expressed by the verb with respect to the utterance situation. For instance, in event semantics, the interpretation of (40a) can be specified as in (40b), that is, the sentence represents the claim of the speaker that there is an event of visiting in the past (at a time before the speech event) in which a certain

individual, named John, figured as the agent of this event and the individual's mother figured as the theme of the event.

- (40) (a) John visited his mother.
 (b) $\exists e$ visiting(e) & past (e) & agent (e , John) & theme (e , his mother)
- (41) (a) John visited his mother. (e_1)
 (b) She was sick. (e_2)
 (c) $e_1 < e_2 < s, e_2 < e_1 < s, e_1 \circ e_2 < s$
 (d) She was sick one week before/after

As is illustrated in (41), this simple linking approach turns out to be insufficient, when considering sentences embedded in a discourse. For instance, linking the sickness event of John's mother in (41 b) directly to the utterance event would be compatible with the temporal readings specified in (41 c): e_1 could precede or follow or overlap with e_2 as long as both of them precede s (the speech event). However, (41 b) is naturally read as indicating that John's mother was sick during the time of his visit. This can be achieved via the introduction of a reference situation. According to Reichenbach (1947), Tense establishes a link between speech time (s) and reference time (r), as is illustrated in (41 a). The event expressed by the verb (e) is then situated with respect to r via Aspect, as is illustrated in (41 b).

- (42) (a) The meaning of tense: Past:= $r < s$; Present:= $r \subseteq s$
 (b) The meaning of aspect: Perfect := $e < r$; Imperfect := $e \subset r$

In the discourse above, we can assume that r is identified with a discourse antecedent that has been established in the previous context, namely the event of John's visit, and it is this event with respect to which the predicate is (temporally) situated in (41 b) and that the temporal adverbial refers to in (41 d). We may assume that a value for this reference situation (s_R) is introduced in FinP in the C-domain and is taken up by Tense.

In the standard account, Tense is analysed as a predicate on points in time or intervals (cf. Stowell 1995 and much subsequent work). In situation semantics, Tense is interpreted as expressing a relation between the utterance situation and the Austinian topic situation (cf. Austin 1961, Elbourne 2005). We propose that the Austinian topic situation is to be identified with the reference situation introduced above. Hence the role of Tense can be defined as given in (43). In the SAT-approach, the temporal interpretation of Tense is secondary.

In this approach, temporal precedence, for instance, is derived from a precedence relation between situations, by referring to the running time of an event (τ), as is illustrated in (44).

(43) Situation-based account of Tense (SAT):
Tense is a predicate that relates situation arguments

(44) Past (s_1, s_2) = s_1 precedes $s_2 = : \tau(s_1) < \tau(s_2)$

Note in particular that the temporal predicate *past* in (3) has a referential use. It does not establish a new reference situation in relation to the given utterance situation. But it acts as a function that only presupposes that a past temporal relation is present in the context and takes the latter's value as its output. While with nominals the referential and attributive use depends on the (de-)accentuation of the nominal predicate, it is the role of Aspect and Aktionsart to determine the referential or attributive use of the Tense predicate, as is illustrated by the contrast between (41 b) and (45). While the stative verb in (41 b) triggers the referential use of Tense, a dynamic verb involves the attributive use of Tense: s_1 is interpreted as non-overlapping with s_2 . Also here a division of labour is at work, since we may assume that the fact that s_2 is interpreted as following s_1 is due to the workings of the Gricean maxim of Manner. In consequence, we would like to propose the hypothesis in (46).

(45) A man entered the room (s_1). He asked for information (s_2).

- (46) (a) The interpretation of Subject expletive *es* (and henceforth Vorfeld-*es*, as we will see below) depends on the semantic properties of the verb
- (b) The interpretation of correlate *es* depends on the contrast between the weak and the strong version of the demonstrative pronoun.

In particular, (46 a) implies that one D-pronoun is sufficient to express both readings of the temporal predicate. Since we concentrate on Subject expletive *es* and Vorfeld-*es* in this paper, the reader is referred to Hinterhölzl (to appear) for further details of the workings of (46 b).

In Hinterhölzl (2019), it is argued that categorical judgments are anchored to the context via a given individual, whilethetic judgments are anchored to the context via the reference situation. If a verb has no individual argument, the predicate can only be anchored via the reference situation to the context. The statement then is about a particular situation. The role of *es* in this anchoring process is described in detail in the following section.

6 ON THE TRUE NATURE OF EXPLETIVE *ES*

We will start the discussion of the true nature of expletive *es* with outlining the properties of Subject expletive *es*. We will argue that Subject expletive *es* is obligatory, because it functions as an argument – namely as the subject of predication – of the verb. We will then discuss the properties of *Vorfeld-es* and explain its optional nature with the fact that – even though it is base-generated in [Spec,TP] like the Subject expletive *es* – it does not function as an argument of the verb and is inserted as a means of last resort in [Spec,TP], which is then moved into the C-domain, just in case the clause lacks an appropriate constituent for anchoring the sentence. We finish our survey of the different non-referential occurrences of *es* with discussing the properties of *correlate-es* for the sake of completeness.

6.1 Subject expletive *es*

What can be said about the status of *es* as a quasi-argument with weather verbs? If we agree that the predicate *regnete* ‘rained’ in (47) denotes the set of situations (in the past) in which it rains, then weather verbs have to be assumed to combine with a situation argument to arrive at a truth value. We propose that this situation argument is identified with the reference situation denoted by Tense.

- (47) *Es regnete* / *It rained*
 s_1 (that is identified with the reference situation) $\in s$ | rains in s

In (47), *es* expresses that a unique situation that is identified by tense and linked to the utterance situation is an element of the set of situations in which it rained – a clear case of predication.

The only difference to predications like *John sang* is that in the former case the argument is of the situation type, while in the latter case the argument is of the individual type. The second difference concerns the fact that the argument of weather verbs is introduced by tense, that is to say, by a temporal relation, while individual arguments are introduced via theta relations.

Again, Tense must be taken to express a relation between two situations, one identified with the utterance situation and the other functioning as the reference situation, the latter of which is arguably bound by *es*.

The concrete proposal is that *es* is a generalized quantifier combining with predicates on situations (denoting a property of situations) like Tense and embedded CPs (in the case of *correlate-es*). As a demonstrative element with a weak reading, it can be identified with the ι -operator deriving the reading

specified in (48b) for the sentence in (48a), where U stands for the utterance situation.

- (48) (a) Es regnete.
 (b) $\iota s. s < U \ \& \ \text{rain in } s$ (there is a unique s preceding the utterance time in which it rains)

The analysis of *es* as a generalized quantifier predicts that *es* combines with a tensed verb in T in a strictly compositional fashion: first the meaning of T and vP is computed, then the generalized quantifier in [Spec,TP] combines with the meaning of T', as is indicated in (49).

- (49) (a) $\lambda s. s < U \ \& \ \text{rain in } s$ (meaning of Tense +vP)
 (b) $\iota s. \lambda P(s)$ (meaning of *es*)
 (c) $\iota s. s < U \ \& \ \text{rain in } s$ (meaning of TP)

In other words, *es* has an existential impact on the assertion of the speaker, as is indicated in (49b,c). As such it lends itself naturally for anchoring existential statements in the context, as is illustrated in (50).

- (50) *Es gab einen Aufruhr*
 it gave an uprising
 'there was a riot'
 there is a unique situation s in the past & there is an x such that
 uprising (x) in s

6.2 Vorfeld-es

While Subject expletive *es* is an argument that functions as the subject of predication and is thus obligatory, Vorfeld-*es* is optional and is inserted only if there is no other constituent that anchors the statement to the context. This is illustrated by the contrast in (51).

- (51) (a) *Hubert Haider spricht.*
 H. H. speaks
 (b) *Es spricht Hubert Haider.*
 it speaks H. H.

While (51a) is a statement about the individual *Hubert Haider*, (51b) is a statement about a situation or a so-calledthetic judgment. While *es* can be called optional from a grammatical point of view, it is obligatory in (51b)

if the speaker intends his statement to be about a situation. But what is the mechanism that renders *es* an argument with weather verbs and in existential constructions, but blocks *es* in its interpretation as a subject in cases like (51 b)?

The special case is represented by weather-verbs and existential constructions. The default case is that the vP that denotes a set of events is closed-off by an existential operator in Aspect. This guarantees that the reference situation is interpreted as locating the verbal event via Aspect (in most cases the reference situation is interpreted as containing the event expressed by the verb), as is illustrated in (52).

- (52) (a) John visited LA last year
(b) $\iota s. s < U \ \& \text{ last year } (s) \ \& \ \exists e \text{ in } (e,s) \ \& \text{ visit } (\text{John}, LA,e)$

Only if the clause lacks a subject entirely, as is the case with weather verbs, or lacks an appropriate subject that can anchor the statement to the context, as is the case in existential and presentational constructions, existential closure of the verbal event is suspended and the event argument of the verb is available for saturation, that is, predication.

Indefinite DPs are assumed to be inapt for anchoring statements to the context. But they can appear in clause initial position and satisfy the V2-property of declarative clauses in German, as is illustrated in (53 a). (53 a) like (53 b) is athetic judgment describing what happened in a specific moment. In (53 a), the statement is anchored by moving the silent reference situation argument of Tense (by head movement) into FinP and the indefinite subject is fronted to satisfy the V2-property of the clause. In (53 b), *es* is inserted in [Spec,TP] and fronted to anchor the statement to the context and simultaneously satisfies the V2-property of the clause. This in turn implies that the V2-rule should be treated as a complex constraint that embodies a syntactic and a phonological condition, as is argued for in Hinterhölzl (2019).

- (53) Was ist (dann) passiert? (What happened then?)
(a) *Ein Mann kam zur Tür herein.*
A man came by the door in
(b) *Es kam ein Mann zur Tür herein*
It came a man by the door in
'A man came in by the door'

This then implies that *Vorfeld-es*, even though it is always inserted in [Spec,TP], cannot appear in the middle-field, since the fronting of another constituent

will satisfy the V2-property and the anchoring to the context can always be achieved in a more economic way by fronting of the silent reference situation argument. Along the same lines, anchoring of embedded clauses (which generally are not subject to the V2-constraint) can be taken to proceed in the most economic way by moving the silent reference situation argument of Tense into the C-domain.

In conclusion, the *Vorfeld-es* is special in that it can simultaneously satisfy the V2-property and anchor the clause to the context as athetic judgment.

6.3 *Correlate-es*

Predicates that only have a subject argument that is not of the individual type, but a full clause, like *eine Schande sein* ‘to be a disgrace’, or *mich freuen* ‘I become happy’, display *es*, if the clause is extraposed as in (54c,d). In this case, *es* is treated as a correlate.

- (54) (a) *Dass Peter zu Hause blieb, ist eine Schande.*
 that P. at home remained is a shame
 ‘That Peter remained at home is a shame.’
- (b) *Dass Peter zu Hause blieb, freute mich.*
 that P. at home remained pleased me
 ‘That Peter remained at home pleased me.’
- (c) *Es ist eine Schande, dass Peter zu Hause blieb.*
 ‘It is a shame that Peter remained at home.’
- (d) *Es freute mich, dass Peter zu Hause blieb.*
 ‘It pleased me that Peter remained at home.’

We can equate the use of (51a,b) with the use of (54), if we assume that the embedded clauses in (54a,b) denote a given situation. Note that a proposition is normally taken to denote a set of situations. We assume here that a proposition that is given in the discourse denotes an individual situation. In (54a,b), the situation that Peter remained at home (and known to the hearer) is asserted by the speaker to be a shameful situation/a situation that arouses joy.

Es in (54c,d) – due to the opposition between *es* and *das* – introduces a new situation that is characterized as one in which the new proposition that Peter is at home is judged as shameful or joyful (Q-based implicature). In other words, in (54a,b) the assertion is anchored via a given situation topic to the context. In (54c,d), where a new situation is introduced, the utterance has *es* as default anchor that relates this situation to the utterance situation.

In particular, we propose that correlate-*es* is introduced in the Specifier position of a D-head that takes the CP-argument of the verb as its complement; as such it binds the situation denoted by the embedded clause. Its CP-complement is then subject to extraposition due to the fact that it represents new information (cf. [Hinterhölzl](#) to appear for the details). If the CP-argument represents given information in the context, the Specifier of this D-head is spelled out as *das* or deleted in the case that its CP-complement is spelled-out depending on the discourse status of this argument: if its content is immediately given in the previous discourse, only the strong determiner is spelled out, as is illustrated in (55 c). If its content is known but needs to be reactivated, the CP-complement of this D-head is spelled out, as in (54a,b).

This interpretation of *es* in (54) is corroborated by the observation in (55): *es* cannot function as a discourse anaphor. *Es* is the weak variant of the strong pronoun *das* and only the latter of them refers anaphorically to a given situation.³⁷

- (55) (a) *Peter blieb zu Hause. Das/es ist eine Schande*
Peter remained at home. That/it is a shame
- (b) *Peter blieb zu Hause. Das/es freute mich*
Peter remained at home. That/it pleased me
- (c) *Peter blieb zu Hause. Das dass Peter zu Hause blieb ist eine Schande*
Peter remained at home. That that Peter remained at home is a shame

Thus, in cases of correlate sentences, we have a pair of expressions *das* and *es* that represent demonstrative elements with a strong and weak reading respectively and binding the situation argument of its complement: the strong one is discourse anaphoric, the weak one – by way of a Q-based implicature – establishes a new discourse referent.

7 FROM THÔ TO ES IN THE HISTORY OF GERMAN

Having discussed the differences between the weak and the strong demonstrative elements *das* and *es* in the previous section and having noted that *es*

³⁷ The assumption that *es* is the weak counterpart of *das* is supported by evidence from German dialects that lack *es* as a full 3sg neuter pronoun. Instead, the relevant varieties exhibit only a corresponding clitic pronoun 's (or 't in Low German) that is paradigmatically related to the full form *das* (or *dat* in Low German), with which it can be replaced, cf. [Mayerthaler & Mayerthaler \(1990\)](#), [Weiß \(1998\)](#) on Bavarian, [Schönhoff \(1908\)](#), [Kühl \(1932\)](#) on Low German varieties.

enters into the grammar in legal texts first, where it typically has an attributive function, introducing a new reference situation that serves to anchor the statement in the context, we would like to propose that *es* originally only had an attributive reading and first replaced *thô* in its deictic use and only gradually came to replace *thô* in its discourse-anaphoric use later.³⁸

Note that the step from *thô* to *es* is a small natural step, since both have the same discourse function which they fulfill by referring to the reference situation. While *thô* refers to the temporal component (or to the locative component after the unification with *thar*) of the reference situation, *es* refers directly to the reference situation.

As has been discussed in detail by Donhauser & Petrova (2009), *thô* was ambiguous between a pure discourse anaphoric use and a pure deictic use: *thô* in post-finite position introduced a new point of reference in V1-clauses, as illustrated in (56), which constitutes the beginning of the Christmas story. *thô* in sentence initial position in V2-clauses in OHG, however, was used to refer back to a pre-established reference point. As is illustrated again in (57), V1 sentences with post-finite *thô* are replaced by V2-clauses with sentence initial *thô* in later texts.

- (56) *warun thô hirta in thera lantskeffi uuahante [...]*
 were thô shepherds in that country abiding
 ‘And there were shepherds abiding in the fields [...]’
 (Tatian, 85,29; Lk, 2,8)

- (57) *Tho wárun thar in lánthe hirta háltente [...]*
 thô were there in country shepherds abiding
 ‘There were shepherds abiding in the fields [...]’
 (Otfrid, Ev. I. 12,1)

We can thus assume that when V2 was generalized, replacing V1-clauses, the system came to require an alternative element, since we can reasonably assume that speakers tended to interpret sentence-initial *thô* probably as a strong definite element in the initial period of the change. Furthermore, note that the weak reading of *thô* was lost, as can be seen from the use of its direct successor *da* in modern standard German. As is illustrated in (58), German *da* relies on a shift of the deictic center, with *da* picking up a pre-established reference situation rather than making an adequate use of a proximal deictic that refers back to the utterance situation, as would be the case in Italian. In

³⁸ A context in which *es* has not replaced *dô/da* ‘there, then’ is in prepositional phrases that are discussed in detail by Hartmann (2008) and Gunkel & Hartmann (2020). We will leave this issue for further research since it goes well beyond the scope of this paper.

other words, the continuation in (58) states that it rained in Iceland, while *qui* (here) in (59 a) in Italian refers back to the utterance situation, requiring the use of the distal deictic element *lì* (there) in (59 b) to refer to the new reference situation.

(58) *Ich machte letztes Jahr Urlaub in Island. Da regnete es.*
 I made last year vacation in Iceland. There rained it

(59) (a) *Ho fatto una vacanza in Islanda l'anno scorso. Qui pioveva.*
 I-made a vacation in Iceland the-year last. Here rained

(b) *Ho fatto una vacanza in Islanda l'anno scorso. Lì pioveva.*
 I-made a vacation in Iceland the-year last. There rained

Two facts indicate that there was a division of labor between *es* and *thô* for a certain period of time, with *es* slowly replacing discourse-anaphoric *thô* in written texts: (i) the loss of the weak reading of *thô* over time, and (ii) the continued discourse-anaphoric use of *thô* in narrative texts in the MHG period.

This is probably the case since *es* links the referred-to event of the main predicate back to the utterance situation, rather than linking it directly to a pre-established reference situation in the context. As such it had the potential to replace *thô* in its deictic use but could be extended to cases where a discourse anaphoric reading is required, since the semantics of *es* only requires that there is a situation identifiable in CG and a discourse-given element is trivially identifiable in the CG. This reading can be illustrated with weather verbs. Note that the discourse-anaphoric reading of *es* in this case can be reinforced with the use of the adverbial *die ganze Zeit* ('the whole time'), which refers to the period that the speaker spent in Iceland.

(60) *Ich machte letztes Jahr Urlaub in Island. Es regnete (die ganze Zeit).*
 I made last year vacation in Iceland. It rained (the whole time)

Taken together, all this strengthens the view that *es* replaced *thô* /*da* in both of its uses, starting with weather verbs and existential constructions, where *es* forms an obligatory argument, as we have shown above, and extending its use to the C-domain due to the loss of V1-clauses, which gave rise to the

requirement of the presence of a default situational anchor in clause initial position.

8 CONCLUSION

In this paper we have shed new light on the historical development of CP expletive *es* ‘it’ in German, by combining new empirical evidence gathered from a range of corpus studies with a novel theoretical approach to the syntax and pragmatic functions of so-called ‘expletive’ elements. Paying special attention to the contexts in which expletive *es* first appeared, we provided new data on linguistic and extralinguistic factors (such as text type and dialect area) that shaped its development. In particular, we have shown that *es* came to be used as a prefield filler earlier than previously thought, with the first clear cases dating to the 12th century. The distribution of *es* in our sample suggests that it originated in the North/East Upper German area, where it is remarkably frequent in legal texts. In addition, we investigated the role of light frame adverbials such as *thô/dô* ‘then’ as potential precursors of the Vorfeld-*es* and addressed the question of why the latter replaced the former in the history of German.

The answer to this question was embedded in a novel proposal concerning the discourse function of CP-related expletives. In particular, we argued that ‘expletive’ *es* is not a semantically vacuous element, but rather a demonstrative element with a weak definite reading. As such it is compatible with introducing a new situation (identified with an argument of Tense, cf. [Hinterhölzl 2019](#)), but also with continuing an established reference situation. We sketched a historical scenario in which *es* first replaced *thô/dô* in its deictic uses and slowly extended its usage domain to anaphoric uses. In conclusion, *es* proved to be a very flexible and versatile element to anchor diverse utterance types to the context, explaining its ubiquitous presence in the modern (written) language.

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