The diachrony of V3 in German (and some similarities with Old English)

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In this paper, we present the results of a large-scale corpus study of so-called V3 word orders in the history of German. The umbrella term 'V3' will be used to refer to main clauses in which the finite verb has moved into a left-peripheral head and the preverbal area of the CP is occupied by more than one element, irrespective of the number of items occupying this domain. In particular, the focus will be on the typology of the attested preverbal sequences in V3 clauses and their syntactic analysis. The existing literature on V3 has dealt with such phenomena in very different ways, relying on disparate conceptual premises and methods. By analyzing all diachronic data in a uniform way and within the same theoretical framework (the cartographic model), this paper seeks to alleviate this deficiency. The data are extracted from three digital corpora of Historical German by adopting the same diagnostics for the different language stages. It will be shown that the syntax of German exhibits basic continuity with respect to the possible V3 sequences allowed. The same criteria are then tentatively applied to a pilot sample of Old English clauses extracted from the York Corpus of Old English Prose. Whereas interesting parallelisms can be individuated, some asymmetries with respect to Old High German emerge, which open up new interesting avenues for future research.[1]

KEYWORDS: German, Verb Third, Old English, cartography, diachrony.

1. Introduction

Present-Day German (henceforth: **PDG**) exhibits linear Verb-Second (**V2**), with the finite verb surfacing to the right of a clause-initial constituent e.g. in declarative matrix structures (1a) and *wh*-questions (1b), and Verb-First (**V1**), with the verb occupying the leftmost position, e.g. in yes-no questions (1c). As illustrated in the examples below, the sentence-initial constituent need not be a subject: it can be, for instance, a direct (1a) or a prepositional (1b) object. In this case, the subject can surface in the middle field:

(1) a. [*Maria*] <u>habe</u>   ich   gestern   gesehen.
         Maria   AUX.PRS.1SG   I.NOM   yesterday   see.PTCP
         'I saw Maria yesterday.'
     b. [*Mit wem*] <u>hast</u>   du   dich   gestern   getroffen?
         with who.DAT AUX.PRS.2SG you.NOM.SG REFL.2SG.ACC   yesterday   meet.PTCP
         'With whom did you meet yesterday?'
     c. <u>Hast</u>   du   Maria   gesehen?
         AUX.PRS.2SG   you.NOM.SG Maria   see.PTCP
         'Have you seen Maria?'

In Present-Day English (**PDE**), instead, structural V2 affects auxiliary and modal (i.e. it does not affect lexical) verbs and is only mandatory in constituent questions (2a) and in a restricted set of environments, such as clauses introduced by a negative adverb (Rizzi 1996) (2b):

(2) a. [*What*] <u>have</u> *you done?*
     b. [*Never*] <u>have</u> *I seen such a terrible mess.*

In the classic generative framework, V2 is interpreted as a result of verb movement to the head position of the CP, the highest layer of the clause, and further raising of a phrase base-generated in some IP/VP position, as schematically illustrated in (3):

(3)   [$_{CP}$ [$_{XP}$]$_i$ [$_{C'}$ Vfin$_j$ [$_{IP/VP}$ t$_i$ t$_j$]]]

In their oldest stages, German and English both feature V-to-C in main clauses, although with different levels of approximation. In fact, V2 is basically retained throughout the history of German (cf., e.g., Axel(-Tober) 2004, 2007, 2018; Hinterhölzl, Petrova & Solf 2005; Speyer 2008, 2010; Fuß 2008; Donhauser & Petrova 2009; Petrova 2012; Walkden 2014, 2017; Demske & Wiese 2016; Hinterhölzl 2017; Speyer & Weiß 2018; Catasso 2021a, 2021b; Catasso *et al.* 2021; Breitbarth 2018, 2022, 2023), while English loses this constraint in the course of the Middle English (henceforth **ME**) period (van Kemenade 1987, 1997, 2002, 2012; Pintzuk 1993, 1999; Kiparsky 1995; Kroch & Taylor 1997; Koopman 1998; Haeberli 2000, 2002a, 2002b; Kroch, Taylor & Ringe 2000; Fischer *et al.* 2000; Hinterhölzl & van Kemenade 2012; van Kemenade & Westergaard 2012; Walkden 2014, 2017; Haeberli & Ihsane 2016; Bruening 2016). Corresponding examples for Old High German (**OHG**) and Old English (**OE**) are given in (4a-b):

(4)   OHG
    a.   [*Dhinera*   *uuomba*   *uuaxsmin*]   <u>*setzu*</u>   *ih*   *ubar*
        your.GEN.SG   womb.GEN.SG   fruit.GEN.SG   put.PST.1SG   I.NOM   upon
        miin   *hohsetli*
        my.ACC.SG   throne.ACC.SG
        'I will place the fruit of your womb upon my throne' (Robinson 1997: 9)
    OE
    b.   [*þa*   <u>*siglde*</u>   *he*   *þonan*   *suðryhte*   *be*   *lande*
        then   sail.PST.3SG   he.NOM   from_there   southwards   along   coast.DAT.SG
        'Then he sailed from there southwards along the coast' (Bech 2001: 3)

However, as is generally the case in Germanic V2 languages (e.g. Kotsinas 1998; Quist 2008; Freywald *et al.* 2013; Haegeman & Greco 2018; Sigurðardóttir 2019; Meelen *et al.* 2020), both (the older stages of) German and OE additionally exhibit so-called 'Verb-Third' (**V3**) or 'verb-later' word orders under specific conditions that are also investigated in the above-mentioned literature. In such configurations, the finite verb of a main clause seems to be linearly preceded by two constituents. This is illustrated in (5a-b):

(5)   OHG
    a.   [*iudei*]   [*uúarlicho*]   <u>*suohton*</u>   *inan*
        Jew.NOM.PL   therefore   seek.PST.3PL   he.ACC
        'The Jews, therefore, were seeking him' (Axel 2007: 219)
    OE
    b.   [*Þeah*   *hweðer*]   [*his*   *hired*   *men*]   <u>*ferdon*</u>   *ut*
        though   whether   his.NOM.PL   household   man.NOM.PL   go.PST.3PL   out
        'Nevertheless, his retainers went out.' (Walkden 2017: 71)

The above-mentioned studies treat V3 and similar arrangements in the different stages of the respective language by adopting different theoretical frameworks and methodologies. As a result, a single derivational model is needed in order to capture the relevant generalizations involving multiply-filled prefields in (Historical) German and (Historical) English.

The aim of this paper is twofold. Its main objective is to complement the existing studies on complex prefields in the diachrony of German by providing data from additional texts and regional varieties and an exhaustive typology of linear V3 within one and the same theoretical approach. In addition, it aims to show that the same methods can be adopted – *mutatis mutandis* – for OE. The latter point will be exemplarily illustrated on the basis of a selection of corpus data and will hopefully pave the way for further investigations taking into account the analogies between these two West-Germanic languages.[2]

The paper is structured as follows: in Section 2, the methodology and the theoretical premises of the empirical study of verb-later arrangements in the diachrony of German are introduced; Section 3 offers an overview of the results by proposing a comprehensive typology of non-V2 main-clause word orders in the diachrony of German, as well as a tentative cartographic analysis of the different patterns attested. In Section 4, a pilot investigation of OE non-V2 is presented. The study of OE V3 is not a conclusive one, but it is rather intended to suggest a possible future line of research in which the data of two related old Germanic languages (OHG and OE) are treated using the same diagnostics. Section 5 concludes the paper.

2. The study: Verb-Late(r) in the history of German

2.1. Premises and research questions

As mentioned above, the complex issue of multiply-filled pre-verbal domains in German main clauses has been treated from different perspectives in (diachronic) Generative Grammar. Even though the existing studies have provided valuable insights into the intricacies of genuine or apparent exceptions to V2, these results are not always entirely comparable, since they either only consider single periods of the history of German – in most cases, even only single constructions attested in one or more language stages – or proceed from diverging theoretical assumptions about the makeup of the left periphery. For this reason, a comprehensive approach to V3 in the diachrony of German is still missing in the literature.

For reasons to become apparent below, in what follows the term 'V3' will be used to identify main-clause word orders in which: (i) the finite verb is positioned in a left-peripheral head (that is, in which V-to-C movement has occurred), and (ii) the pre-verbal area is occupied by more than one element, i.e. linear V4, V5, etc. will also be implicitly covered by the umbrella term 'V3', which thus comes to be used interchangeably with 'verb-late(r)' and 'non-V2' in what follows.

In our analysis, we will make reference to the technicalities and terminology of the cartographic approach (e.g. Rizzi 1997, 2004; Cinque 1999; Belletti 2004), which pursues the idea that the different layers of the clause (CP, IP, vP, VP) consist of finer-grained arrays of highly specialized projections. With respect to the CP, we will assume the basic makeup proposed by Rizzi (1997: 297) as illustrated in (6), in which different positions found in a fixed word order language-internally and

cross-linguistically encode different information-structural values and each projection is made up of one specifier and one head:

(6)   [$_{ForceP}$ [$_{TopP*}$ [$_{FocP}$ [$_{TopP*}$ [$_{FinP}$]]]]]

For the purposes of this study, this array of projections will be expanded in order to make sense of the data attested in the corpus. Moreover, the analysis will also include elements positioned in the 'outer' left periphery, i.e. the clausal portion of structure situated above ForceP.

2.2. Corpus and methods

For the main part of this study, three of the major digital repositories available at the time of data collection and suitable for syntactic investigations of older stages of this language were consulted, namely: the *Referenzkorpus Altdeutsch* (*ReA*, Donhauser *et al.* 2015) for OHG (750-1050), the *Referenzkorpus Mittelhochdeutsch* (*ReM*, Klein *et al.* 2016) for Middle High German (henceforth: MHG) (1050-1350) and the *Bonner Frühneuhochdeutschkorpus* (*FnhdC*, Besch *et al.* 2017) for Early New High German (henceforth: **ENHG**) (1350-1650). The patterns identified for each of these periods were then systematically compared to those attested in PDG, making reference to existing studies as well as to original data.

Some important premises must be made concerning the methodology adopted for this study. In fact, a comprehensive diachronic approach to V3 in German raises a number of problems relative to the sources and to specific peculiarities of the language that must be addressed accordingly in order to obtain comparable data for the different periods.

In the first place, the three corpora of Historical German used for this investigation are, to some extent, annotated dissimilarly with respect to completeness of the tiers and searchability of the single texts. For this reason, the relevant data had to be extracted from each corpus with slightly different strategies. Secondly, the syntax of German in the pre-MHG period poses some challenges for the descriptive, as well as for the generative linguist that can only be circumvented if the analysis is carried out according to very strict criteria. Thirdly, the text genres available for the different language stages are not (necessarily) comparable from a formal point of view. These points are clarified in the next paragraphs.

2.2.1. OHG corpus

For OHG, the three main prose texts of the early period have been considered, namely *Isidor* (*Is.*, 8th century), the *Monsee Fragments* (*MF.*, 9th century) and Tatian's *Diatessaron* (*T.*, 830). As Table 1 shows, *Is.*, *MF.* and *T.* represent different scribal languages, but they are very similar in content, which partly restricts the scope of the variation that can be investigated here (cf. Fleischer, Hinterhölzl & Solf 2008 and Schlachter 2012), but at least makes the OHG corpus rather uniform.[3]

TEXT	TIME OF COMPOSITION	DIALECT	GENRE	MAIN CLAUSES (TOTAL)
Isidor (*Is.*)	late 8th c.	Rhine Franconian	religious	ca. 420
Monsee Fragments (*MF.*)	early 9th c.	Bavarian	religious	ca. 609
Tatian's *Diatessaron* (*T.*)	830	East Franconian	religious	ca. 5,400
Total				ca. 6,429

Table 1. OHG corpus.

The hierarchical tier structure of the *ReA* allows retrieval of different clause types: the approximations in the last column of Table 1 refer to the overall number of main clauses (of all types) present in each of the texts and only has an illustrative purpose. Despite this very advantageous technical feature, in the *ReA*, constituents smaller than the clause are not annotated; therefore, the sub-corpus investigated in the present study consisted of sentences extracted by means of search strings isolating different types of main clauses (declaratives, interrogatives, etc.) in which two elements (identified in terms of their part of speech) occupy the pre-verbal domain. All possible (relevant) part-of-speech combinations retrievable by means of this string were searched for.[4] This implied a considerable amount of manual work, since many results had to be excluded for not corresponding to the target; however, the use of queries significantly expedited and simplified this process by automatically filtering the results according to the two variables inserted in the string.

Two additional aspects played a crucial role in defining the scope of this investigation: (i) all the texts in this corpus are translations from Latin, and (ii) in OHG, the overt syntax is often ambiguous with respect to whether V-to-C movement has taken place (see Axel 2007 for the details), since the asymmetrical-V2 constraint – i.e. the differentiation of V2 and verb-final word order in main and embedded clauses – has still not been fully grammaticalized in this period. As a result, for a large

amount of main clauses in the corpus that replicate the very word order of the Latin source, it cannot be established if they are representative of the native syntax of OHG or simply reproduce the arrangement of the *Vorlage*, as in (7). The linear syntax of (7) is furthermore ambiguous. This sentence can be either analyzed as a V-to-C structure with a multiply filled prefix or as a verb-final structure with extraposition of the PP *fon Imo* ('of him'). This ambiguity is due to the fact that some main clauses exhibit a structural verb-final arrangement in which the verb has not left the VP, especially in Early OHG (cf. Catasso 2021a, 2021b; Petrova 2023). This is taken to be a vestigial structure inherited from Indo-European and Proto-Germanic (Delbrück 1900; Fourquet 1938; Lehmann 1974; Axel 2007; Walkden 2014):

(7) *Iohannes giuuizscaf* <u>*sag&*</u> *fon Imo*
     John   witness.ACC.SG say.PRS.3SG about he.DAT
     'John bear witness of him'
     Iohannes testimonium <u>perhib&</u> de ipso (*T.* 45, 10)

In (8a), the verb has evidently not moved into the C-domain, because the finite verb appears to the right of a verb particle, an element which is typically immovable both in PDG and in the older language stages. Moreover, the linear word order does not exactly replicate that of the Latin text (see the position of the direct object *mala / ubil*). However, the position of the finite verb cannot always be determined by means of diagnostics. The syntax of a sentence like (8b), for instance, is structurally dubious. In this case, its ambiguity does not depend on the Latin source, since the translator has modified the word order: in principle, it could be a verb-final clause with an extraposed PP or a V3 clause in which the finite verb *findemes* ('(we) find') is located in C:

(8) a. *enti · ubil man · fona ubilemo horte · ubil*
        and evil man from evil.DAT.SG treasure.DAT.SG evil
        fram <u>*bringit*</u>[5]
        VPRT bring.PRS.3SG
        'and an evil man brings evil things out of the evil stored up in him'
        et malus homo de malo thesauro <u>profert</u> mala (*MF.* 9, VI, 19-20)
     b. *Dhes   martyrunga   endi   dodh   uuir* <u>*findemes*</u>
        that.GEN.SG martyrdom.ACC.SG and   death we.NOM find.PRS.1PL
        mit urchundin   dhes   heiligen   chiscribes
        with testimony.DAT.SG the.GEN.SG holy.GEN.SG scripture.GEN.SG
        'We find testimony of his martyrdom and death in the holy Bible'
        Cuius passionem et mortem in suo loco scripturarum testimoniis <u>adprobabimus</u>
        (*Is.* 31, 10-13)

For the sake of excluding all potentially irrelevant structures from the dataset, a 'zero-tolerance' approach was adopted for this study (cf. Catasso 2021b): not all the data obtained by means of the search addressed above were considered, but only those which conform to the following two criteria: (i) that they not replicate the syntactic arrangement of the Latin source; (ii) that they not be syntactically ambiguous with respect to verb movement.

In order to satisfy criterion (ii), the diagnostic tests for verb movement proposed by Axel (2007: Ch. 2) were strictly applied. These include, *inter alia*, the presence of some types of non-extraposable elements in post-verbal position (e.g. light/non-focused adverbs and pronouns, as well as particles), the restructuring of the translated clause by means of the left and the right sentence brackets (e.g. in order to render a synthetic verb form of Latin). In the following diagnostic V2 clause, for instance, both criteria are met: (i) the Latin clause has the synthetic verb form *manifestantur* ('are revealed') in final position, while the German translator opted for a split passive construction with the auxiliary in C and the lexical verb in V (ii) the pronominal element *izs* ('it') and the adverbial element *chiuuisso* (here: 'namely') may be assumed to surface in the middle field, with the finite verb *ist* ('is') moving to C:

(9) [*Dhar*] *ist*   *izs*   *chiuuisso* *so*   *zi ernusti*   *araughit*
    there   be.PRS.3SG   it.NOM   namely   so   very_surely   reveal.PTCP
    'There (i.e. in the Book of Daniel), it is certainly revealed'
    ibi certissime manifestantur
    (*Is.* 26, 18-19)

This strict methodology may of course rule out some potentially relevant clauses from the dataset, but has the considerable advantage that it drastically reduces the risk of including data that do not reflect the translator's native syntax.

2.2.2. MHG corpus

After the OHG period, syntactic ambiguity resulting from (the absence of) verb movement is at least not a major problem anymore, since the grammaticalization process of asymmetric V2 is completed approximately between the 11th and the 12th century (cf., among many others, Held 1903 and Szczepaniak 2013: 743f.). Therefore, the linear word order of the clause in MHG is already very similar to that of PDG. This simplifies the data collection, since the extracted clauses do not need to be systematically filtered for diagnostic V-to-C.

For MHG, 12 prose texts covering different scribal languages, genres and the entire period from the 12th to the 15th century were considered, as illustrated in Table 2:

TEXT	TIME OF COMPOSITION	DIALECT	GENRE	MAIN CLAUSES (TOTAL)
Bamberger Arzneibuch (*Bamb.*)	1150	Rhine-Franconian	medicine	120
Zürcher Arzneibuch (*Zürch.*)	end 12th c.	Alemannic	medicine	276
Speculum Ecclesiae (*Spec.*)	2nd half 12th c.	Bavarian / Alemannic	sermon	2,127
Wessobrunner Glaube u. Beichte II (*Wess.*)	2nd half 12th c.	Bavarian	confession	33
Predigtfragmente (*PF.*)	12th-13th c.	Hessian / Thuringian	sermon	156
Mitteldeutsche Predigten (*MP.*)	1200	Rhine-Franconian	sermon	791
Millstätter Predigtsammlung (*Mill.*)	13th c.	Bavarian	sermon	281
Klagschrift der Gesellschaft der alten Geschlechter zu Mainz (*Klagschrift*)	1322	Rhine-Franconian / Hessian	legal text	75
Engelthaler Schwesternbuch (*Engelth.*)	1330-1346	East Franconian	sister-book	1,832
Franziskaner Regel (*FR.*)	14th c.	Swabian / Alemannic	monastic rule	150
Kölner Klosterpredigten (*Köln.*)	14th c.	Ripuarian	sermon	186
Leipziger Predigten A (*Leipz.*)	14th c.	East Central German	sermon	262
total				6,289

Table 2. MHG corpus.

Given that the *ReM* is not syntactically annotated for the time being, the texts were consulted in their entirety and the clauses exhibiting a linear non-V2 order extracted manually.[6] Although the MHG corpus collected for the present study inevitably includes more different texts and offers more thematic and textual variety than the OHG one,

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the data from the two periods are at least quantitatively comparable (ca. 6,429 clauses main clauses in the OHG texts *vs* 6,289 main clauses in the MHG texts).

2.2.3. ENHG corpus

For the ENHG corpus, similar observations can be made as for the MHG one. Since the compilation of both the lexical and the morpho-syntactic annotation of the texts contained in the *FnhdC* was still in progress at the time of data collection, the texts selected for this study were consulted in HTML format, excerpting the data by hand. Eight prose texts of different scribal traditions and genres and covering the whole ENHG period were analyzed, as shown in Table 3. Also in this case, the corpus is quantitatively comparable to the others presented above:

TEXT	TIME OF COMPOSITION	DIALECT	GENRE	MAIN CLAUSES (TOTAL)
Dat nuwe Boych (*Boych*)	1360-1396	Ripuarian	chronicle	340
Mainauer Naturlehre (*Main.*)	end 14th c.	Eastern High Alemannic	medical text	511
Düringische Chronik (*Dür.*)	1421	Thuringian	chronicle	1048
Helene Kottanerin (*Kott.*)	15th c.	Middle Bavarian	narrative	1,190
Kloster Pillenreuth (*Pill.*)	1463	East Franconian	edifying literature	697
Moscouia (*Mosc.*)	1577	Bavarian	chronicle	794
Passionale Mathesij (*Pass.*)	1587	Upper Saxon	sermon	472
Philander von Sittewald (*Phil.*)	1650	Alsatian	narrative	726
total				5,778

Table 3. ENHG corpus.

It goes without saying that the overall composition of the corpus created for this study is 'as good as it can get': full balance with respect to geographical provenance and text genre, if at all possible, could only be achieved if a larger number of sources belonging to the same regional and textual tradition were compared to other groups of sources belonging to other traditions, in order to establish, for instance, whether a given pattern is more frequent or emerges earlier in the one or the other

region or text genre (in a similar fashion to the approach taken e.g. by Fuß & Hinterhölzl 2019 for pronominal prefield elements). This more fine-grained perspective is left to future research. However, it is to be pointed out that the present investigation considers the largest existing collection of data investigated by adopting the very same theoretical assumptions and methodological stipulations.

2.3. Methods and premises

In Table 4, the quantitative data for each language stage are summarized and related to the frequency of the non-V2 patterns attested in the corpus. As shown in the second column, the overall dataset amounts to 18,496 sentences. In the third column, the absolute frequency of diagnostic V3 is given. These values refer to the relevant V3 clauses found, respectively, in the OHG, in the MHG and in the ENHG corpus after filtering out all the non-pertinent data. The fourth column reports the percentage ratio of diagnostic V3 with reference to the absolute frequency:

LANGUAGE STAGE	MAIN CLAUSES (TOTAL)	ABSOLUTE FREQUENCY OF DIAGNOSTIC V3	PERCENTAGE FREQUENCY OF DIAGNOSTIC V3
OHG	6,429	107	1.66%
MHG	6,289	1,026	16.31%
ENHG	5,778	937	16.22%
total	18,496	2,070	11.19%

Table 4. Absolute and percentage frequency of diagnostic V3.

At this point, these values are neither indicative of a diachronic development – at least with respect to the transition from OHG to the following stages – nor particularly informative in general, since: (i) a considerable amount of OHG data were excluded from the dataset due to their ambiguous syntactic status (which affects the corresponding percentages: note that the MHG and ENHG data, instead, are remarkably similar); (ii) some patterns are attested more frequently than others, which makes the percentage frequencies of diagnostic V3 (fourth column) only provide a general heuristic sense of the data; (iii) as will be shown in 3.3, it is often the case that multiple patterns occur in one and the same utterance, generating, in some cases, linear V4, V5, etc. arrangements (cf. 2.1 for a terminological premise). For the lat-

ter reason, it is not readily possible (nor would it be interesting, given the scope of this paper) to demonstrate how often the single V3 patterns occur, but only with what frequency sentences exhibiting non-V2 patterns are attested. In what follows, we do not discuss the statistical frequency of each pattern, but concentrate on the attested structures, which were classified into comparable categories, and the corresponding syntactic derivation.

3. The diachrony of V3 in German

The main clauses with a linear non-V2 order attested in the OHG, MHG and ENHG corpus all fall into one of two macro-categories, namely non-correlative (10) and correlative (11) constructions, each including different patterns that will be considered individually in the next paragraphs. These structures include the following sequences:

(10) Non-correlative constructions
    a. adverbial > XP > Vfin
    b. XP > adverbial > Vfin
    c. topic > topic marker > Vfin
    d. discourse particle(s) > (XP) > Vfin
    e. textual connective / modal adverb > XP > Vfin

(11) Correlative constructions
    a. adverbial > adv. resumptive
    b. left-dislocated DP > pronominal resumptive

The term 'correlative' identifies constructions in which the two elements occupying the left periphery of the clause share a common reference. The non-correlative patterns, instead, include left-peripheral sequences in which the two (or more) preverbal elements refer to different entities or have a different formal status.

The analysis reveals that by adopting a common approach for all language stages and with respect to the single phenomena, the same patterns can be shown to be attested throughout the history of German, and that V3 seems to have remained diachronically stable.[7]

The frequency values for each of the patterns in the historical stages OHG, MHG and ENHG are anticipated in Table 5:

	OHG	MHG	ENHG
NON-CORRELATIVE			
a. adverbial > XP	26/107 P1: 0.4% P2: 18.57%	146/1,026 P1: 1.85% P2: 14.23%	141/937 P1: 2.44% P2: 15.04%
b. XP > adverbial	7/107 P1: 0.1% P2: 5%	17/1,026 P1: 0.27% P2: 1.66%	29/937 P1: 0.5% P2: 3.09%
c. topic > topic marker	21/107 P1: 0.33% P2: 15%	13/1,026 P1: 0.2% P2: 1.26%	51/937 P1: 0.88% P2: 5.44%
d. discourse particle(s) > (XP)	22/107 P1: 0.34% P2: 15.71%	2/1,026 P1 : 0.03% P2 : 0.19%	5/937 P1: 0.08% P2: 0.53%
e. connective marker/adverb > XP	19/107 P1: 0.29% P2: 13.57%	49/1,026 P1: 0.78% P2: 4.77%	39/937 P1: 0.67% P2: 4.16%
CORRELATIVE			
a. adverbial > adv. resumptive	8/107 P1: 0.12% P2: 5.71%	549/1,026 P1: 8.73% P2: 53.5%	519/937 P1: 8.98% P2: 55.38%
b. left-dislocated DP > pron. resumptive	4/107 P1: 0.06% P2: 2.85%	363/1,026 P1: 5.77% P2: 35.38%	256/937 P1: 4.43% P2: 27.32%

Table 5. Frequency of the single diagnostic V3 patterns in the diachrony of German.

The absolute frequencies (e.g. 26/107 for the non-correlative pattern 'adverbial > XP' in OHG) refer to the total of the sentences in the (sub)corpus of (diagnostic) V3 main clauses exhibiting the respective pattern. The corresponding percentage is given in P2 (e.g. 18.57% for 26/107). For the sake of completeness, in each cell these values are accompanied by P1, which refers to the statistical frequency of the single phenomena in relation to the sum of all main clauses considered (with and without Verb-Late(r) and, in the case of OHG, with diagnostic and non-diagnostic character).

As mentioned above, while the MHG and ENHG numbers are directly comparable, the OHG corpus only includes a subset of the data collected. However, the frequency values illustrated in Table 5 give a general idea of the distribution of the phenomenon in the different language stages.

Apart from the development and distribution of the single constructions, some general tendencies prove particularly striking when we observe these data in diachrony:

- in particular from MHG onwards, resumptive patterns represent the great majority of linear V3 constructions; the non-correlative patterns are indeed diachronically continuous in High German, but they constitute a (more or less) marginal option in all historical stages;

- considering the discrepancy between the OHG and MHG/ENHG data discussed above, the pattern 'XP > adverbial' appears to have been rather frequent in OHG;

- the frequency of left-peripheral discourse particles and connective elements in first utterance position decreases after the OHG period.

In what follows, the single patterns are discussed in detail with respect to their features and syntactic derivation.

3.1. Non-correlative patterns

3.1.1. Frame(-like) XPs in the left periphery

The first pattern that can be identified in the dataset is one in which an adverbial appears in first position and another XP surfaces in second position to the immediate left of the finite verb. Within this group, the adverbial can have a clausal or non-clausal form.

3.1.1.1. Adverbial > XP > Vfin

In (12-14), the first position of the clause is occupied by an adverbial clause. The elements that may occupy the second position in Historical German are variable, but typically include, e.g., another non-argument (12), an interrogative element (13), or a pronoun (14). This pattern is continuously attested from OHG to ENHG. For reasons of space (and for the sake of comparability), only sentences containing temporal clauses are illustrated in the following examples. It seems, however, that the first clause position in this pattern can be occupied by virtually any type of adverbial clause (cf., e.g., Axel 2004, 2007; Fuß 2008; Speyer 2008; Demske & Wiese 2016; Breitbarth 2018, 2022, 2023; Catasso 2021a, 2021b):

(12) OHG
[*Dhar   ir   quhad   »christ   iacobes   gotes«,*] [*chiuuisso*]
when   he.NOM say.PST.3SG   Christ   Jacob.GEN   God.GEN   certainly
meinida   ir…
mean.PST.3SG   he.NOM
'When he said "Christ of Jacob's God", he certainly meant the son and the father'
Dicendo enim christum dei iacob et filium et patrem ostendit (*Is.* 15, 16-18)

(13) MHG
[*do   unsir   here   got   vertilkite . alliz   daz   in*
when our   lord   God   destroyed   all.ACC.SG that.NOM.SG in
der   werlde   was .   sunder   di   in   der
the.DAT.SG   world.DAT.SG be.PST.3SG except   that.ACC.PL in   the.DAT.SG
archin   warin .]   [*wilich*]   *sint   aber   sine   vinde*
ark.DAT.SG   be.PST.PL   which   be.PRS.3PL   then   his.NOM.PL   enemy.NOM.PL
'After/since God destroyed all that existed in this world except those in the Ark,
who are now his enemies?' (*MP.* c3ra,27-30)

(14) ENHG
[*Da   das   Her   L.   horat,*]   [*Das*]   *geviel*
when   that.ACC.SG lord   L.   hear.PST.3SG this.NOM.SG delight.PST.3SG
im   nicht   gar   wol
he.DAT.SG   not   very   well
'When Lord L. learnt that, he was not pleased about it.' (*Kott.* 113, 24, 36-37)

This pattern, which has been variously discussed to be characteristic of Kiezdeutsch, a metropolitan ethno-/sociolect of German (Wiese 2012), is not supposed to be part of the syntactic inventory of (Standard) PDG (Hinterhölzl 2017; Walkden 2017; Breitbarth 2022, 2023; Sluckin & Bunk 2023). In (colloquial) spoken usage, however, it is frequently attested (cf., e.g., Auer 1996, 1997; Bunk 2020; for the same phenomenon in West Flemish, cf. Haegeman & Greco 2018, Greco & Haegeman 2020). In (15a), for instance, an adverbial clause occurs in first position, followed by a light pronoun. In (15b), a direct speech from a theatrical piece, a preposed temporal clause precedes a *wh*-pronoun. As regards the prosodic contour of such V3 constructions, the first constituent is obligatorily separated from the second one by means of a short break (also cf. Altmann 1981), which of course cannot be tested for the periods preceding PDG:

(15) PDG
a. [*Wenn   ich   traurig   war,*]   [*ich*]   *bin   immer*
   when   I.NOM   sad   be.PST.1SG I.NOM   AUX.PRS.1SG always
   zu   ihm   gegangen.
   to   he.DAT   go.PTCP
   'When/if I was sad, I used to go to him.' (*Tagesthemen*, Apr. 18th, 2021, 9:32)

b. *Und* [*als du da warst,*] [*warum*] <u>*hast*</u>
and when you.NOM there be.PST.2SG why AUX.PRS.2SG
du mir zugehört?
you.NOM I.DAT VPRT.listen.PTCP
'And why did you listen to me while you were in there?' (R. Pollesch 2014: 18)

As will be contended below, in light of the prosodic features of this pattern and in order to preserve the force of the V2 constraint – which is not put into question in this paper –, there are good reasons to believe that it is not the adverbial, but the element in second position that interacts with the V2 syntax of the clause. In other words, this linearization does not violate the V2 constraint, since only one constituent (in the examples above: the lower XPs *ich* 'I' and *warum* 'why') is moved into the clausal left periphery, while the higher one is base-generated.

From OHG to PDG, the very same pattern is attested in sentences in which the first of the two constituents is a non-clausal adverbial. Note that preposed adverbial clauses on the one hand and non-clausal preposed adverbials on the other hand are often treated as different syntactic objects in the literature (see, e.g., Salvesen 2016 for some types of preposed adverbials in Old French). (Historical) German, however, does not seem to feature any relevant differences between clausal and non-clausal adjuncts in first clause position.[8] As shown in the following examples, the non-clausal adverbial can have different forms: it can be a PP (16), a DP (17) or an adverb (18):

(16) OHG
[*In dhemu eristin deile chuningo boohho*]
in the.DAT.SG first.DAT.SG part.DAT.SG king.GEN.PL book.GEN.PL
[*su*] <u>*ist*</u> *chiuuisso chiscriban…*
so be.PRS.3SG namely write.PTCP
'In the first part of the Books of Kings, the following is namely written…'
In libro quippe primo regum ita scribtum est… (*Is*. 15, 3-5)

(17) MHG
[*Des sibinden / tagis*] [*alliz daz gezimere.*
the.GEN.SG seventh.GEN.SG day.GEN.SG all.NOM.SG the.NOM.SG building
daz / dar ist.] … <u>*sal*</u> *alliz zevarin*
that.NOM.SG there be.PRS.3SG shall.PRS.3SG all.NOM.SG crumble.INF
'On the seventh day, all buildings will fall into ruin.' (*MP*. b3va,30-b3vb,02)

(18) ENHG
[*Dar nach*] [*die edel kungin*] <u>*fuer*</u> *enhalb Ofen…*
afterwards the.NOM noble queen go.PST.3SG to Ofen
'Afterwards, the noble queen travelled to Ofen…' (*Kott*. 113, 10, 16-17)

Again, this pattern is not generally acceptable in written Standard PDG, but it is in spoken language. In recent studies by Breitbarth (2022, 2023), it is shown, on the basis of speech analysis data using PRAAT, that this structure – although infrequent as compared to other patterns – not only is part of PDG speakers' oral production even in contexts that can be characterized as belonging to the standard language (e.g. in interviews), but also exhibits recurring features (e.g. a change in rhythm or intonation, or a phonological pause). This also seems to be a further argument in favor of a comparability between clausal and non-clausal adjuncts (see note 7):

(19) PDG
      [*Im*   *Meer*]   [*man*]   <u>*kann*</u>   *reingucken*.
      in.the.DAT.SG   sea   one.NOM   can.PRS.3SG   look_inside.INF
      'In the sea, you can look inside.' (adapted from Breitbarth 2022: 9, her (11))

Thus, it seems that the pattern illustrated in this section has been – at least with respect to its presence in the system – diachronically continuous from the oldest stages of the language up to PDG. Given that Historical German also has a V2 syntax and that in the period between the 8th and the 17th century this pattern is attested much less frequently than the sequence 'Adverbial > Vfin' in the appropriate contexts, it can be assumed that it must have co-existed as a marked option to run-of-the-mill V2 from OHG to ENHG.[9] Of course, it is not possible to assess the degree of acceptability of this structure for the periods preceding PDG. However, a notable difference between the historical and the PDG pattern is that the former occurs in written language, while the latter is limited to spoken usage. Therefore, it seems reasonable to think that the left-peripheral structure 'Adverbial > XP > Vfin' must have been part of the system as an alternative to 'XP > Vfin > … Adverbial …' or 'Adverbial > Vfin > … XP …' serializations throughout the history of German (also cf. Wiese & Müller 2018), and that the standardization of the language has gradually expelled this marked option from the speakers' perception of 'well-behaved' language. An alternative would be to assume that V2/V3 of the standard type is an unstable feature in parametric terms. In this sense this is true, there might be a level of microvariation in the speaker community (in the spirit of Haegeman & Greco 2018 for West Flemish). As proposed by Wiese *et al.* (2020), V3 appears to be a pragmatic natural order which can at times override the grammar. If this is true, then V3 might arise in production as a mismatch between the syntax and interface requirements.

3.1.1.2. XP > Adverbial > Vfin

A further pattern that can be identified in the corpus and also includes a frame-setting(-like) constituent surfacing in the CP-domain is one that is similar to that illustrated in 3.1.1.1, but in which the clausal or non-clausal adverbial is not the higher, but the lower constituent in the left periphery:

(20) OHG
[*thiz folc*]   [*mit leffurun*]   <u>*eeret*</u>   *mih*
this   people   with   lip.DAT.PL   glorify.PRS.3SG   I.ACC.SG
'These people glorify me with their words'
populus hic labiis me honorat (*T.* 127, 27)

(21) MHG
[*Scen philippus*]   [*/nach unsirs heren uffart/...*]   <u>*pendigite*</u>
holy   Philip   after   our.GEN.SG   Lord.GEN.SG   ascension   preach.PST.3SG
daz gotis wort in samaria
the.ACC.SG   God.GEN   word   in   Samaria
'Philip the apostle preached in Samaria... after our Lord's ascension'
(*MP.* c1vb,15-c1vb,19)

(22) ENHG
[*Dy liben heiligen*]   [*offt*]   <u>*erscheynen*</u>
the.NOM.PL   dear.NOM.PL   saint.NOM.PL   often   appear.PRS.3PL
den krancken zw iren leczten zeiten
the.DAT.PL   sick.DAT.PL   to   their.DAT.PL   last.DAT.PL   times.DAT.PL
'The endearing saints often appear to the sick in the last hours of their lives'
(*Pill.* 178, 3-4)

(23) PDG
[*Ihr Anwalt,*] [*mit umständlicher Begründung, dringlich*
their   lawyer   with   sophisticated.DAT.SG   motivation   pressingly
und in aller Form] <u>*beantragte*</u> *Wahrheitsbeweis*
and   in   all.DAT.SG   form   request.PST.3SG   proof_of_the_truth
'With a sophisticated argumentation, pressingly and in due form, their lawyer requested a proof of the truth.' (Lühr 1985: 18)

For reasons of space, only the variant with a non-clausal adverbial in second position, which is less frequent in PDG, is shown here for all language stages in (20-23). Also in this case, basic historical continuity is observable in the older stages German, and this arrangement is possible in spoken PDG as a marginal option. The same pattern with an adverbial clause in second position is also diachronically stable and attested up to PDG.[10] In both cases, the adverbial is not prosodically integrated. Note that in PDG, the formal degradation of the non-clausal adverbial in second position tends to increase if the adjunct is phonologically light (as in (22)) and to decrease if it is a heavy constituent

(as in (23)), but both patterns are formally possible (cf. Müller 2003; Meinunger 2004). No information is available about the actual acceptability of this pattern in Historical German, but the incidence of patterns of the type in (22) is very limited as compared to that of constructions containing longer sequences. This possibly also accounts for the much higher frequency – both in Historical and PDG – of V3 with second-position adverbial clauses, which tend to be phonologically heavier than single adverbs.

3.1.1.3. Derivation of the patterns 'Adverbial > XP > Vfin' and 'XP > Adverbial > Vfin'
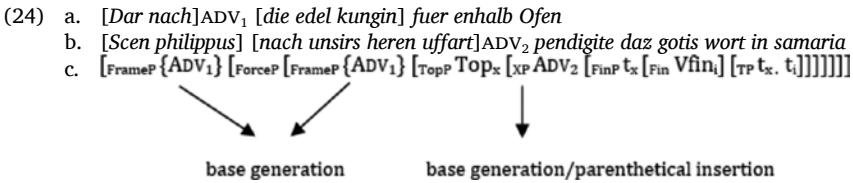
In relation to the syntactic derivation of the two patterns illustrated above, which have a clausal or non-clausal adverbial in first (3.1.1.1) or second (3.1.1.2) position, respectively, the question needs to be raised as to whether the surface position of the adjunct XP results from movement or base generation.

In V2 languages, only one full XP may be moved into a left-peripheral specifier to satisfy an EPP-like feature (Chomsky 2000, 2001) carried by C which requires that this position be filled (cf., among many others, Müller 2002, Haider 2020, Jouitteau 2020). The movement of this constituent into Spec,CP and the operation raising the verb from V to C are inseparable components of a mechanism that does not allow any structural exceptions. This implies that only the phrase that actively interacts with verb movement can be assumed to be moved into C° from a lower base-generation site. In the patterns addressed so far, neither the adverbial in the higher position nor the adverbial in the lower position seems to be the one that is involved in this interplay with the V2 syntax of the clause. Thus, it can be assumed that they are both base-generated in the position in which they are pronounced in their respective construction. This has already been proposed in the literature for adverbial clauses in first position (see, for instance, Axel 2002, 2004). However, we do not commit to an analysis in which this constituent must be clause-external, i.e. base-generated above ForceP. In fact, this phrase could also be first-merged in a high CP-internal position.[11] Something similar can be assumed for the lower adverbial in second position, which may be generated there or even be the result of a parenthetical insertion. If we assume this, then the V2 constraint is violated LINEARLY, but not STRUCTURALLY, which *per se* corresponds to a non-violation of the corresponding computational constraint.

The analysis of these two patterns can be formalized as follows. In both sequences, the argument which surfaces in the CP area together with the adverbial is systematically an aboutness or contrastive Topic

(in the spirit of Frascarelli & Hinterhölzl 2007). Between the two constituents, this is certainly the one that interacts with V2. We will assume that this constituent is moved from the TP/VP area. The higher adverbial is base-generated in the specifier of a clause-internal or clause-external projection[12] that we call 'FrameP' following the current terminology (Haegeman & Greco 2018, in the same spirit as Poletto 2002; Emonds 2004; Benincà 2006; Cinque 2008; Giorgi 2014; De Vries 2009, etc.). The lower adverbial, instead, is base-generated in some projection to the right of the TopP hosting the argument (arguably a lower FrameP; its status, however, is still to be determined).[13] In both cases, the topic reaches its landing site via Spec,FinP, thereby deriving the Bottleneck Effect, while the finite verb is moved into Fin° and surfaces in that position.

This is illustrated in (24c). The examples in (24a) and (24b) replicate (18) and (21), respectively, for the reader's convenience. The label 'ADV1' refers to the adverbial surfacing in first, the label 'ADV2' refers to the adverbial surfacing in second position within the left periphery:

(24) a. [*Dar nach*]ADV$_1$ [*die edel kungin*] *fuer enhalb Ofen*
      b. [*Scen philippus*] [*nach unsirs heren uffart*]ADV$_2$ *pendigite daz gotis wort in samaria*
      c. [$_{FrameP}$ {ADV$_1$}] [$_{ForceP}$ [$_{FrameP}$ {ADV$_1$}] [$_{TopP}$ Top$_x$ [$_{XP}$ ADV$_2$ [$_{FinP}$ t$_x$ [$_{Fin}$ Vfin$_i$] [$_{TP}$ t$_x$. t$_i$]]]]]]]

base generation   base generation/parenthetical insertion

A syntactic analysis that takes into account which of the two constituents actively interacts with the V2 syntax of the clause and which one does not produce a derivation in which the V2 constraint is violated linearly (two XPs are situated in the CP-domain), but – crucially – not structurally (only one XP is moved into the left periphery via Spec,FinP).

3.1.2. So-called 'topic markers'

A further pattern identified in the corpus includes a full constituent in first position and a so-called 'post-initial particle' (Pasch *et al.* 2003, Onea & von Heusinger 2009, Volodina & Weiß 2010, Breindl 2011, Catasso 2015, Speyer & Weiß 2018, Catasso *et al.* 2021) in second position in the left-periphery of the clause.

3.1.2.1. XP > Post-initial particle > Vfin

The items occurring in second position in this pattern, which are often labeled 'topic markers' due to the very high frequency with which they immediately follow frame-setting and (non-familiar) topics, generally perform the function of signaling that the referent of the constituent to their left is to be interpreted contrastively (with respect to some other

constituent presented in the discourse) or as a shifting/aboutness Topic (when the referent is newly or re-introduced or to mark speaker alternations in dialogic contexts). These elements are never 'lexical *unica*', but represent grammaticalized and highly specialized versions of originally adverbial or conjunctional lexical entries (cf., e.g., Breindl 2008, 2011 and Karagjosova 2012).

As illustrated in the following examples, this pattern is *per se* also diachronically stable. Moreover, the PDG structure is not particularly marked and occurs in spoken interaction, as well as in formal contexts of written language (e.g. in the press or in literary texts):[14]

(25) OHG

[*Sie*]	[*tho*]	*antalengitun*	*imo.*	*neín*
they.NOM	tho	answer.PST.3PL	he.DAT	no

'They answered to him: No.'

Responderunt ei: non (*T.* 236, 2, from: Catasso *et al.* 2021: 2)

(26) MHG

[*Die*	*bruoder*]	[*avch*] …	*suln*	*sich cleiden* …
the.NOM.PL	brother.NOM.PL	indeed	shall.PRS.3PL	REFL dress.INF

von de=muotigem	*tuoche*…[15]
of modest.DAT.SG	cloth.DAT.SG

'The brothers, indeed, shall all… wear modest clothes…' (*FR.* 2va,06-12)

(27) ENHG

[*Darna*]	[*euer*]	*schickden*	*sy*	*anderwerf*…
afterwards	however	send.PST.3PL	they.NOM	again

'Afterwards, however, the Council ordered again that…' (*Boych* 438, 3)

(28) PDG

Nach	*Wanne-Eickel*	*kamen*	*nur*	*wenige*	*Linguisten.*
to	Wanne-Eickel	come.PST.3PL	only	few.NOM.PL	linguist.NOM.PL

[*Nach Rom*]	[*allerdings*]	*kommen*	*sie*	*fast*	*alle.*
to Rome	however	come.PRS.3PL	they.NOM	almost	all.NOM.PL

'Only few linguists came to Wanne-Eickel. However, almost everybody is coming to Rome.' (adapted from Breindl 2011: 25)

The sentence in (25) is part of a dialogue in which Speaker A (Jesus) says something and Speaker B (*sie* 'they', i.e. the apostles) replies. The particle *tho* (originally conveying a deictic-temporal value, i.e. 'there'/'in that time', and which substantially disappeared after the OHG period) cannot be readily translated, since it has a functional role here: it lexicalizes the information-structural status of the constituent it accompanies. In (26), *auch* has a more general factual rather than the exclusively additive meaning of PDG *auch* 'also' and immediately follows the DP referent *die bruoder* ('the brothers (of the Franciscan order)'),

which is reintroduced and realizes an aboutness topic; in (27) and (28), two constituents that would be classified as run-of-the-mill frames (or frame-like constituents) in a more neutral context are explicitly contrasted to some situation described in the pre-context, thereby generating some kind of 'contrastive frame-setting topic'.

3.1.2.2. Derivation of the pattern 'XP > Post-initial particle > Vfin'

At this point, the question arises as to whether the element in post-initial position in the CP-domain is a maximal projection or a head. In the literature, different formalizations are found for this pattern in PDG (the interested reader is referred to Volodina & Weiß 2010, Catasso 2015, Speyer & Weiß 2018 and Catasso *et al.* 2021 for the technical details).

There are good reasons to believe that post-initial particles are not full XPs and that they are base-generated in the head position of the left-peripheral projection hosting some kind of topic at PF. This (aboutness/shifting/ contrastive or frame-setting) topic is a moved phrase in most cases, as illustrated in (29). If this is the case, the corresponding phrase is raised into the relevant CP specifier via Spec,FinP to derive the Bottleneck Effect:

(29) $[_{TopP/FrameP}$ TOPIC$_x$ $[_{Top'/Frame'}$ PARTICLE $[_{FinP}$ t$_x$ $[_{Fin'}$ VFIN$_i$ $[_{TP/VP}$ t$_x$ t$_i$ $]]]]]$[16]

Further evidence in favor of an analysis in which the item in second position is not moved into the CP-domain together with the phrase that it immediately follows comes from the fact that such particles can also appear to the right of hanging topics, which are themselves topics first-merged in some specifier above ForceP. This possibility is consistently attested both in Historical German and in PDG, as the following examples illustrate:

(30) MHG
    [*Vnser herre S.   Ioh-es*] [*dennoch*]… *hvb   er   sich /*
    our   Lord holy John   however   go.PST.3SG he.NOM   REFL
    in   die   wste
    in   the.ACC.SG desert
    'Our Lord, the holy John, however, went to live in the desert.' (*Mill.* 5v,02-03)

(31) PDG
    *Ich   finde   alle   Kollegen   nett.   *[*Der*
    I.NOM   find.PRS.1SG all.ACC.PL   colleague.ACC.PL   nice   the.NOM.SG
    Hans] [*aber*] – *mit   diesem   Idioten   will   ich*
    Hans   however with   that.DAT.SG   idiot.DAT.SG   want.PRS.1SG I.NOM
    nichts   zu   tun   haben!
    nothing   to   do.INF   have.INF
    'I get along well with my colleagues at work. But Hans – I don't want to have anything to do with that idiot!'

In (30), the DP in clause-first position must be a hanging topic, since the real grammatical subject of the sentence (*er* 'he') is positioned in the middle field. In the PDG example in (31), the topic contrastively introduced in the outer left periphery of the second sentence, a DP bearing nominative case, is followed by the particle *aber* and resumed in the prefield by a PP in which the referent is mentioned again within a PP by means of an epithet.

This analysis has two advantages: it makes sense of all the data presented above and – crucially – it does not violate the V2 constraint structurally, since it predicts that only one XP enters the left periphery of the clause by movement from the TP/VP area.

3.1.3. Left-peripheral sentence particle(s)

Another structure among the non-correlative V3 constructions emerging in the corpus includes a limited set of sentence particles (glossed as 'PRT' in the examples) freely occurring in the left periphery and associated with specific readings of the corresponding sentence. As will be shown below, this pattern differs from the one presented in 3.1.2: in the first place, these particles do not accompany an XP and, as a consequence, do not surface in post-initial position, but occur at the beginning of a sentence; furthermore, they do not lexicalize an information-structural feature, but correlate with the illocution and modality of the clause.

3.1.3.1. Modal particle(s) > (XP) > Vfin

In this pattern, one or more particles modifying the illocution/modality of the sentence surface(s) in clause-first position. With respect to the phenomenon investigated in this paper, of course, only the simultaneous occurrence of at least two particles has been considered, since the corresponding arrangements result in a linear V3 order. These particles may introduce yes/no questions (32) or *wh*-questions (33), but also appear in declarative clauses (34). Among the V3 patterns addressed in this study, this is the most subjected to diachronic change. This is to be ascribed to two facts: (i) most lexical items falling into this group disappear. This is, for instance, the case of *eno* (glossed as PRT in (32)); (ii) the domain in which particles expressing (or related to) the modification of illocution and common ground are physically realized, at least in the standard case, moves diachronically from the CP to the middle field:

(32) OHG

[*enonu*	*ia*]	*sint*	*zuelif*	*citi*	*thes*	*tages?*
PRT.PRT	PRT	be.PRS.3PL	twelve	hour.NOM.PL	the.GEN.SG	day.GEN.SG

'Are there not twelve hours in a day?'
nonne XII hore sunt diei (*T*. 229, 27)

(33)   MHG

[ía]	*[wâ]*	*flîefen*	*die*	*vnfer*	*tôr wêrtele.*	*do…*
PRT	where	sleep.PST.3PL	the.NOM.PL	our	gatekeeper.NOM.PL	when

'Where were our gatekeepers sleeping when…?' (*Mill.* 33va,1)

(34)   ENHG

Dann	*[ja]…*	*[Speise]*	*gung*	*von*	*dem*	*Fresser*	*vnd*
for	PRT	food	go.PST.3SG	from	the.DAT.SG	eater	and

Süssigkeit	*von*	*dem*	*Starcken*
sweetness	from	the.DAT.SG	strong.DAT.SG

'For out of the eater came forth meat, and out of the strong came forth sweetness.'
(*Phil.* 25-26)[17]

In (32), three particles appear in the left periphery (irrespective of the graphic realization of the complex *enonu* in clause-initial position, *inu* and *nu* are two distinct units). In the OHG period, this is a frequent pattern for the construction e.g. of rhetorical questions (but for a much more detailed account of the semantic and distributional properties of these items, see Axel 2007 and Petrova 2017). The frequency of the sequence 'Sentence particle(s) > (XP) > Vfin' appears to be strongly reduced after the OHG period (see Table 5 in Section 3),[18] but at least one of these left-peripheral particles, *ja*, exhibits diachronic continuity, albeit as a marginal element, in sentences in which it performs the very same function in modifying the illocution of the utterance.[19] In (33) and (34), sentence-initial *ja* is of course optional and stresses the propositional content verbalized in the clause, which is rhetorical in the MHG and declarative in the ENHG example. As Petrova (2017: 317) convincingly demonstrates for OHG, "features considered essential for the felicitous interpretation of modern German modal particles can be identified in the contexts in which *inu* and *ia* occur". These include, for instance, the ascription of an expressive meaning to a contextually relevant utterance or the expression of the speaker's stance with respect to the content and the truth value of the proposition (confidence, skepticism, surprise, etc.). In fact, if we consider the function of sentence-initial *ja* in (35) (from a scientific essay published in 1895) and the overall meaning of the sentence it introduces, it becomes apparent that the left-peripheral particle modifies the sentence in the same way as if it were located in the middle field. The content of the second conjunct of this coordination could, in principle, be rephrased as a parordinating *denn*-clause (Höhle 1986) with the form '… *denn es kann ja eigentlich nicht anders geschehen*': the particle reinforces the assertion made in the first part of the utterance:[20]

(35) New High German
Psychische	*Vorgänge*	*sollen*	*in*	*der*	*Sprache*
psychic.NOM.PL	process.NOM.PL	shall.PRS.3PL	in	the.DAT.SG	language
der	*Psychologie*	*behandelt*	*werden,*	[*ja*] [*es*]	*kann*
the.GEN.SG	psychology	treat.PTCP	AUX.INF	PRT it.NOM	can.PRS.3SG
eigentlich	*gar*	*nicht*	*anders*	*geschehen.*	
actually	at_all	not	differently	happen.INF	

'Psychic processes should be treated using the language of psychology, (it is evident that) it cannot be otherwise.' (Breuer & Freud, *Studien über Hysterie* [1895], p. 11)[21]

Given that in all structures addressed so far involving one or more of these particles the linear order of the clause results in a Verb-Late(r) syntax, it is worth asking the question how the surface arrangement of these sentences is obtained.

3.1.3.2. Derivation of the pattern 'Modal particle(s) > (XP) > Vfin'

For the particle *inu*, it has been proposed that it is base-generated in Spec,ForceP (Axel 2007) or in some split configuration of ForceP in OHG (Petrova 2017). In fact, the latter assumption is in line with the undeniable fact that *inu* can be merged – syntactically and even orthographically – with other particles (*nu* in the OHG example above). Axel (2007: 2011) goes on to contend that OHG *ja*, instead, is located in Spec, FinP, while Petrova (2017: 321) shows that this element must be generated above FinP. Petrova's assumption is also confirmed by the diachronic data illustrated above: in (33), the particle is situated above a *wh*-interrogative; in (34), it is found to the left of an aboutness topic (which is generally assumed to have its surface position above WhP, cf. Frascarelli & Hinterhölzl 2007); in (35), *ja* is positioned before what seems to be an expletive, whose position can in no case be lower than FinP, at least in standard cartography. It is therefore plausible that these left-peripheral particles are all first-merged in very high – but formally distinct – positions within the CP-domain (also see Axel-Tober 2018: 43).

We assume particles in general not to be XPs, as is implicitly the case in an analysis in which they appear in a specifier position, but heads realizing a functional feature (in the spirit of Biberauer, Haegeman & van Kemenade (eds.) 2014). As for the particles attested in our corpus, it is reasonable to think that different highly specialized projections are present in the leftmost domain of the OHG CP generating the items addressed here (36). The projections become reduced or disappear in the following periods of the language, without nevertheless completely ruling out the possibility of spelling out a particle in this area. From MHG onwards, the head position of ForceP can be assumed to be responsible for the licensing of these particles (37):

(36)   OHG
   $[_{inuP} [_{inu°} inu] [_{nuP} [_{nu°} nu] [_{jaP} [_{ja°} ja] \ldots [_{FinP} [_{TP} \ldots]]]]]$[22]

(37)   MHG/ENHG/PDG
   $[_{ForceP} [_{Force°} ja] \ldots [_{FinP} [_{TP} \ldots]]]$

Note that this is not an *ad-hoc* solution: ForceP is, in fact, the projection generally assumed to correlate with the spell-out of modal particles in the middle field in PDG (irrespective of the technical details of this analysis, which vary considerably in the literature and which will not be reviewed here for space reasons; for German, see among many others Abraham 1995, Zimmermann 2004a-b, Coniglio 2011, Gutzmann & Turgay 2016). In those syntactic contexts in which ForceP is not present, e.g. in truncated infinitival clauses, modal particles are not licit.

The simple derivation sketched above not only accounts for the fact that in PDG, only one particle (spelled out by Force°) is possible in this pattern, but is also compatible with the idea that neither in OHG nor in the following periods, the presence of these elements – alone or in combination with lower constituents, as shown in (33-35) – violates the V2 constraint structurally, since they are merged in their surface position.

3.1.4. Clause-external adverbs/markers

The last of the non-correlative patterns addressed in the present work include a large group of constructions in which one or more items performing a textual and/or pragmatic discourse function linearly precede any type of constituent occupying the left periphery of the clause. These elements are certainly part of the utterance, but appear to be completely disintegrated and will therefore be assumed to be generated clause-externally. Also in this case, the phenomenon seems to be diachronically continuous.

3.1.4.1. (Clause-external) adverb/marker > XP > Vfin

In the data attested exhibiting these items, a group of elements that typically characterize spoken interaction (in fact, typically occurring in direct speech and sermons in our corpus of Historical German) contribute to the explicitation of textual and speaker-hearer relations in the discourse. Some of these elements have already been discussed in the diachronic literature (e.g. Axel 2007, Speyer 2008, Ferraresi 2018; also cf. e.g. Zifonun *et al.* 1997, Wöllstein 2014 and Breindl *et al.* 2015: 127 for PDG), but for the time being, there is no consensus as to their syntactic position(s). These elements, which can be assumed to be prosodically non-integrated and separated from the constituent to their right by means of a prosodic break, are exemplified in (38-41) and include (but are not limited to) markers of relevance (38) (OHG *see* generally trans-

lates Latin *ecce* 'see'/'behold') or of textual-narrative coherence (39-40) and sentence adverbs (41):

(38) OHG
[*See*] [*adam*] *ist*   *dhiu*   *chiliihho* *uuordan*   *so*
see   Adam   be.PRS.3SG that.INSTR.SG similar   become.PTCP   as
einhuuelih   *unser*
one   we.GEN
'Adam then became one of us [i.e. a human being].'
Ecce adam factus est quasi unus ex nobis (*Is.* 18, 5-6)

(39) MHG
[*Mer*] [*sente Paulus*]… *legit*   *zwa*   *darzů*
moreover holy   Paul   lay.PRS.3SG   two   to_it
'And the holy Paul adds two of them.' (*Köln.* 23,21)

(40) ENHG
[*Nu*]   [*der*   *lieb sant Pauls*]… *thet*   *nicht*
now   the.NOM.SG   dear holy Paul   do.PST.3SG   nothing
'Now, (the good) St. Paul did not do anything.' (*Pill.* 185, 14-15)

(41) PDG
Aber [*immerhin*], [*wir*] *leben*   *noch.*
but   after_all   we.NOM   live.PRS.1PL   still
'But after all, we are still alive.' (adapted from Wöllstein 2014: 72)

See in (38) is what Haegeman & Hill (2013) would define as a pragmatic 'attention-drawing' interjectional element, similar to English *behold*, introducing (a part of) a sequence that is signaled to be decisive in the narration. In this function, *see* has clearly lost the semantics associated with its verbal etymon and is bound to the speaker's intervention in the text, which this element lexicalizes. *Mer* in (39) (cf. PDG *mehr* 'more') contributes to the organization of the narrative, but the V3 order in which it appears indicates that this element is not part of the syntactic computation and corresponds to a construction that is also recognizable for colloquial PDG (e.g.: … *Außerdem – wir haben gewonnen*, lit. 'moreover – we have won'). *Nu* in (40) is also productively attested in diachrony both in narrative and argumentative texts; its flavor is not textually neutral, but additionally encodes some kind of anticipation on the part of the speaker that the following passage will contain a crucial point. The lexical item *immerhin* in (41) is not simply a 'conjunctional adverb' (Wöllstein 2014: 72), but also entails an evaluative component that correlates with the speaker's expectations.[23]

What these sentence-initial items have in common (although falling, in part, into different parts-of-speech classes) and differentiates them from the patterns addressed above is that they function as prag-

maticalized markers performing a discursive function related to text cohesion and/or to dialogic coherence. They also lexicalize the speaker's presence in the discourse, but are more similar to adverbs with a wide scope than to particles. Note that the *nu* belonging to this group (cf. (40)) – is neither the same syntactic object as in 3.1.3 (see, e.g., (32)) nor a temporal adverb, but another (etymologically related) element with a different function. This comes as little surprise: in PDE and in many other languages, the lexical entry *now* also has a representative in this class (cf., e.g., the translation we propose for (40)).

3.1.4.2. Derivation of the pattern '(Clause-external) adverb/marker > XP > Vfin'

The fact that these fully optional elements do not interact with the V2 syntax of the clause and perform a purely textual-pragmatic function (different from the illocutive modification of the clause related to the particles addressed above) points to a clause-external base-generation site. In fact, their occurrence does not seem to be related to the functions generally associated with clause-internal ForceP, but rather to establishing a relation between the clause they linearly introduce and the (pre-)context and/or the speaker's dimension.

In an approach *à la* Haegeman & Hill (2013), who consider different strategies of syntacticization of discourse in a number of languages, it can be assumed that the elements illustrated above are all merged outside of the domain delimited by ForceP. In this paper, we will not go into details as to the specific position of every item, which we leave to future research, and will limit ourselves to the observation that the base-generation site of each of them is arguably clause-external:

(42) $[_{XP}$ clause-external adverb/marker $[_{ForceP} … [_{TP} …]]]$

Just like in the other patterns, the base-generation of such items in the position in which they are spelled out ensures that the V2 constraint not be violated.

3.1.5. Non correlative patterns: general tendencies

In sum, the analysis of non-correlative V3 configurations reveals three crucial facts: (i) that despite obvious changes in the morphosyntactic arrangement of the language, there is basic diachronic continuity with respect to the diagnostic Verb-Late(r) constructions attested in the corpus; (ii) the pattern 'Argument > Argument > Vfin' is not attested in Historical German (for a review of the literature on the patterns discussed in the literature, cf. Catasso 2021a-b);[24] (iii) the analyses proposed here are in line with the idea that these patterns represent linear,

but not structural violations of the V2 constraint implying a Bottleneck Effect.

3.2. Correlative patterns

The second large group of linear V3 structures attested (with exceptional frequency) in the German corpus is represented by two types of correlative constructions in which the left periphery is occupied by two elements – a full constituent and a resumptive – that have the same reference. These two subclasses are discerned on the basis of the very nature of the resumptive and can be categorized as 'adverbial' and 'pronominal' resumptive constructions, respectively. Both classes exhibit historical continuity, although they seem to be much more frequent in the MHG and ENHG period than in OHG and in PDG. In the latter period, adverbial and pronominal resumption are phenomena typically occurring in spoken language.[25] This development consisting in the 'exclusion' of a redundant linearization from the written canon plausibly correlates with the standardization of the language, which can be argued to start in the 17th century (cf., e.g., Dürscheid & Schneider 2019). In all language stages, the phonetic realization of the resumptive is fully optional in both constructions.

3.2.1. Adverbial resumption

In this pattern, a preposed adverbial is taken up by a resumptive also occupying some pre-verbal (i.e. prefield) position. As illustrated for the constructions addressed in 3.1.1, the adverbial resumed left-peripherally can be a clause (43), a PP (44), an adverb (45) or a DP in adverbial function (46). Three adverbial resumptives that are particularly frequent (but display slightly different diachronic trajectories) in the history of the German language are *dann* (lit. 'then', cf. (43)), *so* (lit. 'so', cf. (44-45)) and *da* (lit. 'there', cf. (46)):

(43) OHG

[*oba*	*ih*	*sín*	*giuuati*	*birinu*]$_i$	[*thane*]$_i$	<u>*uuirdu*</u>
if	I.NOM	his	vestment	touch.PRS.1SG	then	become.PRS.1SG

ih	*heil*
I.NOM	whole

'If I may touch his clothes, I shall be whole'
quodsi uel uestimentum eius t&igero salua ero (*T.* 95, 11-12)

(44) MHG

[*Andeme*	*tage*]$_i$	[*so*]$_i$	<u>*zeiget*</u>	*er*	*sine*
on	that.DAT.SG day.DAT.SG	so	show.PRS.3SG	he.NOM	his.ACC.PL

wnden
bruise.ACC.PL

'On that day, he will show his bruises' (*Mill.* 2v,23-24)

(45) ENHG

[*Darumb*]ᵢ [*so*]ᵢ <u>*laß*</u>   *ich*   *diesen*   *schandlichen*
therefore so   let.PST.1SG I.NOM that.ACC.SG nefarious.ACC.SG
Mann   *stehen*
man   stand.INF
'For this reason, I will leave that nefarious man behind' (*Phil.* 10,32-33)

(46) PDG

[*Jeden*   *Tag,*]ᵢ [*da*]ᵢ <u>*lieb*</u>   *ich*   *dich*   *ein*
every.ACC.SG day   there love.PRS.1SG I.NOM   you.ACC   a
kleines   *bisschen* *mehr*
little   bit   more
'Every day I love you a little bit more' (title of a popular German song, 1963)

All three elements are still part of the syntactic inventory of PDG. Note that especially in Historical German, virtually any type of topicalized adverbial can be resumed in pre-verbal position.

3.2.2. Pronominal resumption

The pronominal resumption patterns found in the corpus include left dislocations and hanging topicalization. The status and definitional boundaries of these two phenomena have been under debate in the theoretical literature (at least) for four decades now (for an overview, see among many others Altmann 1981, Cardinaletti 1989, Grohmann 2000, Boeckx & Grohmann 2005, Nolda 2004, Frey 2004b, 2005, Shaer & Frey 2004, Ott 2015; for problems related to the recognizability and classification of both phenomena in OHG, see Axel 2007). For the purposes of the present paper, we assume left dislocation to involve a CP-internal DP (which is systematically an aboutness or contrastive topic) resumed pre-verbally by a *d*-pronoun exhibiting the very same φ-features; and the topic in hanging topicalization to be prosodically and syntactically detached from the structure, therefore not necessarily agreeing with the resumptive (which, in turn, is not necessarily a *d*-demonstrative) in case, number and gender. In fact, the resumptive need not even be situated in pre-verbal position in hanging topicalization.

Both phenomena are attested throughout the history of German and are still very common in spoken PDG. Note that in some cases – notably, when both the dislocate and the resumptive exhibit nominative morphology and no prosodic evidence is available –, left dislocation and hanging topicalization cannot be distinguished from each other. This is, for instance, the case with (47) and (48), but not with (49) and (50), where the sentence-initial DP is in the accusative and dative, respectively, and the same goes for the resumptive. In the latter cases, the structure must be categorized as a left dislocation. For the sake of simplicity,

in the examples below the pronominal resumptive is glossed as 'RES' irrespectively of how the structure is to be classified:

(47) OHG
      [*thie*   *morganlihho*   *tág*]$_i$ [*ther*]$_i$ *bisuorg&*
      the.NOM.SG   tomorrow.NOM.SG   day.NOM   RES.NOM.SG worry.PRS.3SG
      sih selbo
      REFL.ACC.SG
      'Take the trouble of the day as it comes'
      crastinus enim dies.' sollicitus erit sibi ipse (T. 71, 14-15)[26]

(48) MHG
      [*Elisabeth*]$_i$ [*div*]$_i$ *gebar*   *einin*   *sun*
      Elisabeth   RES.NOM.SG   bear.PST.3SG   a.ACC.SG   son
      'Elisabeth gave birth to a boy' (*Spec.* 74v,9)

(49) ENHG
      unde   [*Helenam*]$_i$ [*die*]$_i$ *nam*   *her*   *selbir*
      and   Helena.ACC   RES.ACC.SG   take.PST.3SG he.NOM   REFL.NOM.SG
      'He chose Helena for himself' (*Dür.* 36, 20)

(50) PDG
      [*Dem*   *Seminarleiter,*]$_i$ [*dem*]$_i$ *gelingt*   *alles.*
      the.DAT.SG lecturer   RES.DAT.SG succeed.PRS.3SG everything
      'That lecturer succeeds in everything he does.' (adapted from Altmann 1981: 237)

Also in the adverbial and pronominal resumption patterns, therefore, two elements occupy the (extended) left periphery of the clause. At this point, the question arises as to whether these phenomena can be analyzed as being compatible with the Bottleneck Effect or, differently from the patterns observed in the previous section, they constitute a genuine violation of V2.

3.2.3. Derivation of pronominal and adverbial resumption patterns
Also in this case, it is compelling to assume that none of the correlative patterns illustrated above structurally violate the Bottleneck Effect. As has been proposed in the literature by a number of scholars (Cinque 1977 and Grewendorf 2002, a.o.), (pronominal) left dislocation can be operationalized as involving cyclic movement of a 'big DP' from its base-generation site in the middle field to its landing site (the specifier of the projection hosting aboutness or contrastive topics) via an intermediate projection in whose specifier a trace spell-out is pronounced as the *d*-pronoun resuming the dislocate.

We assume this analysis and propose that the specifier in which the resumptive occurs at PF is either Spec,FinP (in which the dislocate derives the Bottleneck Effect) or some other low-peripheral specifier

into which the dislocate must be subsequently moved to acquire some additional discourse/information-structural feature. Abstracting away from the specific technicalities of this process, positioning the resumptive in Spec,FinP makes sense because this element is – without exception – immediately adjacent to the finite verb in this construction. We also contend that this analysis can easily be extended to the adverbial construction: the corresponding XP is moved into the left periphery via Spec,FinP, where the resumptive, which replicates the referential features of the topicalized constituent, is 'dropped' and pronounced, depending on the antecedent, e.g. as *dann*, *da* or *so*. Note that this analysis is also advantageous because it permits us to account for the optionality of the realization of the resumptive in both constructions: the trace can be pronounced or not pronounced, and this does not produce any interpretive difference. For the sake of clarity, in (51) it is assumed that the position in which the resumptive is pronounced is Spec,FinP. The landing site of the finite verb is Fin°, as contended above:

(51) $[_{ForceP} [_{TopP/FrameP} [\text{DISLOCATE}]_x \dots [_{FinP} [\text{RES}]_x [_{Fin^\circ} \text{VFIN}_i] [_{TP/VP} \dots t_x \dots t_i]]]]$

As for hanging topics, the detached status of the DP antecedent and the (potential) non-agreement of antecedent and resumptive – besides the fact that at least in PDG, a prosodic break must intervene between the topic and the rest of the clause – indicate that such constituents are directly merged in some clause-external position above ForceP (labeled 'HT' in (52)), while the resumptive is dislocated into the CP-domain by leftward movement. In this case, the resumptive is located in the specifier compatible with its interpretation:

(52) $[_{HT} [\text{HANGING TOPIC}] [_{ForceP} [_{XP} [\text{RES}]_x [_{FinP} t_x [_{Fin^\circ} \text{VFIN}_i] [_{TP/VP} \dots t_x \dots t_i]]]]]]$

Crucially, in these analyses no structural violation of V2 is implied: in the derivation of both left-dislocated topics and topicalized adverbials resumed pre-verbally, only one full constituent enters the CP-domain from a lower portion of the clause.

3.3. Co-occurrence of V3 patterns

As already mentioned in Section 2.3, some of the patterns illustrated in Section 3 may co-occur both in Historical and PDG, compatibly with the interpretability of the resulting configuration. This is particularly interesting for at least two reasons: (i) it demonstrates that the left periphery of the clause from OHG to PDG must be assumed to be larger than the one-specifier hypothesis would suggest (also cf. Fuß 2008,

Walkden 2014, 2017). Moreover, a comparison of the patterns attested in Historical German and in PDG shows that it does not seem to be the case that German has evolved from a relaxed to a strict V2 language (and the position of the verb, as contended above, also appears not to be subject – at least not as a general rule – to language change);[27] (ii) if one accepts the operationalizations proposed above, it confirms that the CP-domain may host multiple elements without violating the V2 constraint (i.e. the Bottleneck Effect).

A number of possible combinations of these patterns are attested in our corpus. In what follows, we will illustrate with concrete examples some of the most interesting ones. In (53), sentence-initial *zisperi* ('indeed', 'certainly') can be assumed to fall into the category of clause-external sentence adverbs base-generated in a position above ForceP. The conditional clause to its right, instead, in positioned CP-internally (arguably in its landing site Spec,FrameP) and is taken up by the resumptive *thanne* ('then') in pre-verbal position. If one accepts the idea that the surface position of this adverbial clause results from cyclic movement into the left periphery and that the resumptive is a trace spell-out in Spec,FinP (or in a similar specifier), then the Bottleneck Effect is properly derived, even if more than one constituent appears in the area to the left of the finite verb.

(53) OHG

[*zisperi*] [*oba mir gilimphit mit dir zisterbanne*]$_i$
indeed if I.DAT behove.PRS.3SG with you.DAT to_die.INF.DAT
[*thanne*]$_i$ *niforlougnu thin*
then not.disown.PRS.1SG you.GEN
'Indeed, (even) if I have to die with you, I will not disown you.'
&iamsi oportuerit me // mori tecum // non te negabo (adapted from *T.* 277, 21-23)

In the following MHG example, two adjuncts (an adverbial DP and a *so*-clause) with clearly distinct values (the first one is a temporal, the second one a conditional adverbial) appear in the left-peripheral domain. A resumptive, *so*, surfaces pre-verbally. The latter can – in principle – be assumed to resume one of the two adverbials to its left (note that *so* is compatible with both temporal and conditional antecedents in MHG, differently from PDG; cf. Catasso 2021c). Whether the resumed adverbial is the higher or the lower one cannot be established with certainty here, but this detail does not play a crucial role with respect to the inviolability of the V2 constraint, since according to what has been proposed in 3.1.1, there are (at least) two structural positions for adjuncts in the CP. Therefore, one of them (arguably, the non-resumed

XP) might have been first-merged in a high Spec,FrameP within the clause-internal CP or even clause-externally:

(54) MHG

[*Ander*	*tage*]$_i$	[*so*	*man*	*nit*	*vastet*]$_x$	[*so*]$_{i/x}$	*mugen*
other	day.ACC.PL	if	one.NOM	not	fast.PRS.3SG	so	can.PRS.3PL

si	*kese*	*vnd*	*aiger*	*ezzen*
they.NOM	cheese	and	eggs.ACC.PL	eat.INF

'On the other days, they are allowed to eat cheese and eggs as long as they are not fasting.' (*FR*. 3rb, 19-22)

In (55), a peculiar pattern is observable that is only possible in colloquial spoken interaction in PDG. In this sentence, the XP in first position must necessarily be a hanging topic, since the two arguments required by the lexical verb (*daz* and *dehein buoch*) surface between the lower left periphery and the middle field. The hanging topic is followed by a temporal adjunct, to whose right, in turn, the direct object appears. Thus, three elements occur in the left periphery of this sentence. Now, excluding the hanging topic, which must be generated clause-externally, two options are possible for the analysis: (i) it could be the case that the *do*-clause is a frame-setter that is base-generated either clause-externally (but lower than the hanging topic) or clause-internally, and that the pronoun is an independent constituent (with a very general or 'wide-scope' reference to the situation depicted above and possibly also in the precontext); (ii) the second option is that the adjunct has the form of a temporal adverbial clause, but in fact semantically functions as the antecedent of the pronoun *daz*, which would therefore be a resumptive here. If that were the case, then it could be assumed that the *do*-clause is merged in a lower portion of the structure and cyclically moved to a CP-internal Spec,FrameP, thereby leaving a trace in Spec,FinP spelled out as *daz* (which would basically amount to speculating that this clause looks like a *when*-clause, but functions as a topicalized *that*-clause):[28]

(55) MHG

[*s. Petrus.*]	[*do*	*er*	*gotis*	*dri*	*stunde*	*uerlovgent.*]
St. Peter	when	he.NOM	God.GEN	three	time.ACC.PL	deny.PST.3SG

[*daz*]	*en*	*zelt*	*dehein*	*buoch*
that	not	tell.PRS.3SG	no	book

'That the holy Peter denied God three times is not told in any book.' (*Spec*. 39r,22-39v,01)

In the ENHG example in (56), an interesting configuration is found in which the highest constituent is, just like in (55), a hanging topic, this time followed by a topic marker (cf. examples (30-31) above). The status

of the DP in clause-initial position is disambiguated by the occurrence of a personal pronoun (*sy* 'they') referring to the very same entities, the two brothers, in the middle field. It suggests itself, on the basis of what we have said, that the hanging topic is generated in a specifier above ForceP and that the particle *aber* lexicalizes the features associated with this projection, being merged in its head. The XP interacting with the V2 syntax of the clause must be the adverbial *als*-clause here, which is not taken up by any overt resumptive in this sentence:

(56) ENHG

[*Die*	*zwen*	*gebrǖeder*]	[*aber*]	[/*als*	*sy*
the.NOM.PL	two	brother.NOM.PL	however	when	they.NOM
das	*vernamen*/]	*haben*	*sy*	*den*	*list*	*gebraucht*
that.ACC	hear.PST.3PL	AUX.PRS.3PL	they.NOM	the.ACC.SG	slyness	use.PTCP

'When the two brothers heard that, they used a trick' (*Mosc.* C1v., 3-4)

A seemingly almost identical construction is possible in PDG in which the DP in clause-initial position is arguably a left-dislocated – here: contrastive – topic displaying non-nominative morphology and resumed by a *d*-pronoun (*den*) in Spec,FinP, and the intermediate domain between the topic and the resumptive is occupied by an adverbial clause situated in the specifier of the functional projection hosting base-generated/parenthetically inserted objects (generically labeled 'XP' in (24)). In this case, it is the DP *den Mann* that induces the Bottleneck Effect and is cyclically raised to a higher Spec,TopP hosting contrastive topics via Spec,FinP, where its trace *den* is phonetically realized at PF. The particle *aber* is directly merged in the head position of this projection. The temporal clause has a generated/parenthetical nature.

(57) PDG

context:
The woman was around all the time.
clause:

[*Den*	*Mann*]	[*aber*],	[*zumindest*	*als*	*wir*
the.ACC.SG	man.ACC.SG	however	at_least	when	we.NOM
im	*Hotel waren*,]	[*den*]	*haben*	*wir*
in_the.DAT.SG	hotel be.PST.1PL	RES.ACC.SG	AUX.PRS.1PL	we.NOM
überhaupt	*nicht*	*gesehen.*
at_all	not	see.PTCP

'The man, instead, we didn't meet at all, at least while we were staying at the hotel.'

The resulting ('minimal') structure of the CP-domain that we assume for the diachrony of German on the basis of the data and the analyses discussed so far is the following:

(58) [FrameP/HT/sentence adverb [ForceP [FrameP [TopP [WhP [XP/Adjunct [FinP [TP …]]]]]]]]

In this representation, which is certainly incomplete since it only focuses on the patterns illustrated so far, (at least) six projections appear in the clause-internal domain of the left periphery of Historical and PDG. Fin° is the landing site of the finite verb in main clauses, while Spec,FinP hosts the trace of every constituent that enters the CP inducing the Bottleneck Effect. In the specifier immediately left-adjacent to FinP (XP-adjunct), non-moved frame-like constituents are base-generated (or even have parenthetical character). This position is preceded by the projection into which *wh*-interrogatives are moved (note that for the time being, there does not seem to be any evidence that in German, FocP and WhP are two different projections); to its left appears the higher TopP, in which aboutness and contrastive topics occur and in whose head topic markers can be generated. The higher FrameP can be assumed to be the standard position for adjuncts with a frame-setting function. The position of the XPs surfacing here can be the result of base generation or movement; in ForceP, which delimits the clause-internal CP, left-peripheral modal particles are merged. In the 'outer' left periphery, the area to the left of ForceP, we found a number of elements arguably base-generated there, including (but not limited to) adverbial adjuncts and hanging topics (whose projections can be headed by topic markers) and sentence adverbs. As we said, the latter elements may co-occur in the same sentence. The order appearing in the leftmost bracket in (58), however, is only indicative. The relative position of these projections is left to future research.

4. Some similarities with OE

As stated in Section 1, XP-fronting and verb movement in OE have been studied extensively, but the syntactic accounts given in the literature differ considerably.

The large body of research on the topic has uncovered important generalizations, which are briefly summarized in the following (for details, the reader is referred to van Kemenade 1987, Pintzuk 1999, van Kemenade & Los 2006, Fuß 2008, Pintzuk & Haeberli 2008, Speyer 2010, van Kemenade & Westergaard 2012, Walkden 2014, 2017, a.o.).

Whereas V2 is invariably triggered by *wh*-movement, clause-initial negation and when the sentence is introduced by the adverbs *þa* and *þonne*, the presence of a fronted subject (or object) does not (always) trigger V2. Furthermore, while it has been shown that pre-verbal subjects in V3 con-

figurations are usually pronominal (van Kemenade 1987, Pintzuk 1999), nominal subjects are also found (Bech 2001, Haeberli 2002a). Moreover, also objects pronouns can be moved past the finite verb (Pintzuk 1999).

Even though different information-structural definitions have been employed, it is generally agreed upon that the element preceding the finite verb is usually highly salient in discourse (cf. for instance Bech 2001 and van Kemenade & Milicev 2012), while the first constituent in the clause, which can be of diverse syntactic nature, is usually a frame (cf. Fuß 2008, Walkden 2014). Finally, recent research by Catasso *et al.* (2021) has shown that familiar, shifting and contrastive topics can be found in V3 and verb-later configurations in OE.[29]

Example (59) features V2 triggered by the discourse adverb *þa,* whereas example (60) shows a V3 sentence with a frame and a pronominal subject. Example (61) shows that a sequence of a direct and an indirect object can be also found in V3 configurations. Finally, in example (62), a frame-setting adverbial preceding the subject can be observed.

(59) [*Þa*]   *ongan*   *he*   *ærest*   *sprecan*   *to*   *þam*
     then   begin.PST.3SG   he.NOM   first   speak.INF   to   DET.DAT.SG
     munece
     monk.DAT.SG
     'Then he first began to speak to the monk.'
     (comary,LS_23_[MaryofEgypt]:65.42, from: Walkden 2014: 67)

(60) [*æfter* *his* *gebede*]   [*he*]   *ahof*   *þæt*   *cild*   *up*
     after   his   prayer.DAT.SG   he.NOM   lift.PST.3SG   DET.ACC.SG   child   up
     'After his prayer he lifted the child up.'
     (cocathom2, +ACHom_II,_2:14.70.320, from: Walkden 2017: 71)

(61) [*Fela*   *spella*]   [*him*]   *sægdon*   *þa*   *Beormas*
     many.ACC.PL   story.ACC.PL   he.DAT   tell.PST.3SG   DET.NOM.PL   Permian.NOM.PL
     'The Permians told him many stories.'
     (coorosiu,Or_1:1.14.27.243, from: Walkden 2017: 71)

(62) [*Her*] [*Wulstan* *arcebiscop*]   *onfeng*   *eft*   *biscoprices*
     here   Wulstan   archbishop   receive.PST.3SG again   bishopric.GEN.SG
     on Dorceceastre.
     in Dorchester
     'This year, Archbishop Wulstan received again the bishopric in Dorchester.'
     (cochronD,ChronD_[Classen-Harm]:954.2.1107)

Whereas the empirical facts illustrated here are generally agreed upon in the literature, their syntactic derivation is a matter of long-standing debate. The point in which derivations diverge is the landing site of the verb in V3 configurations in OE.

In the accounts put forth by Pintzuk (1999), Kroch, Taylor & Ringe (2000), Speyer (2008, 2010), it is contended that the verb can either target I°/T° in non-V2 configurations, or C° in strict V2 contexts. Fuß (2008) proposes, in a similar vein, that the verb in OE V3 surface word orders does not move to the C-layer.

(63) $[_{CP}$ *wh-*/negation/discourse adverb $[_{C°}$ Vfin $[_{TP}$ $[_{T°}$]]]

(64) $[_{CP}$ $[_{C°}$ $[_{TP}$ Subject $[_{T°}$ Vfin]]] (adapted from Fuß 2008: 197)

According to other authors, the verb moves to a lower head in the split CP-domain. For instance, according to van Kemenade (1997, 2009, 2012), van Kemenade & Westergaard (2012), when categorical V2 is triggered, the verb moves as high as C°, whereas it is taken to target a position located between CP and TP, namely FP, when discourse-given subjects are moved to the left periphery, see (65a,b). More recently, Links (2018) and van Kemenade & Links (2020) have assumed a P(a)rt(icle)P located between FP and TP, where discourse particles such as *þonne* are merged.[30] Finally, Spec, TP hosts discourse-new subjects. The structures proposed are summarized in (65):

(65) a. $[_{CP}$ *wh-*/negation/discourse adv. $[_{C°}$ V$_{fin}$ $[_{FP}$ $[_{F°}$ $[_{PRTP}$ $[_{PRT°}$ $[_{TP}$ $[_{T°}$]]]
      b. $[_{CP}$ $[_{C°}$ $[_{FP}$ discourse-given subj. $[_{F°}$ V$_{fin}$ $[_{PRTP}$ $[_{PRT°}$ *þonne* $[_{TP}$ discourse-new subjects$[_{T°}$]]]
      (adapted from van Kemenade & Westergaard 2012: 91, van Kemenade & Links 2020: 15)

That the verb moves out of the TP is also defended by Bruening (2016), who argues for a CP-recursion scenario, and Walkden (2014, 2017), who argues for an extended left periphery.[31]

The accounts involving the movement of the verb to a lower position in the extended left periphery capture one important feature which constitutes the element immediately preceding the verb, namely its given, highly salient, D-linked nature.

This and the fact that the element preceding the finite verb is not always the subject, but can be an object, as in (62), cannot be accommodated in an account in which the verb does not move past TP and the constituent immediately preceding it is in Spec,TP, according to Walkden (2014, 2017, 2021).[32] In other words, whereas the constituent before the finite verb need not be a subject, it is very likely to be a topic; this, of course, is not consistent with the EPP-feature-driven Spec,TP position, but rather with Spec,TopP.[33]

Finally, the assumption that the verb moves to the C-domain in main clauses, but not in subordinate clauses, can account for the fact that V2 and V3 word order in sentences headed by a complementizer

is extremely rare (van Kemenade 1997, Salvesen & Walkden 2017, Walkden & Booth 2020, Walkden 2021).

As has become evident from the arguments summarized above, it is feasible to postulate an extended left periphery for OE as well (cf. also van Gelderen 2019 for a split CP account of OE main clauses). In fact, it has been shown that OE V3 arrangements usually consist of a frame and a topic preceding the finite verb. It is, however, unclear whether OE allows for the same configurations as found in the diachrony of German. Moreover, some of the examples given in the literature do not exhibit clear instances of verb movement, cf. (66) below, which could be analyzed as an instance of Verb Raising, or (67), where no light constituent follows the finite verb:[34]

(66) [*Ælc   yfel*]   [*he*]   *mæg*   *don*
     each   evil   he.NOM   can.PRS.3SG   do.INF
     'He can do each evil.' (WHom, 4,62, from: Bruening 2016: 3)

(67) [*Her*] [*Oswald   se   eadiga   arceb*]   *forlet*
     here   Oswald   DET.NOM.SG   blessed.NOM.SG   archbishop   forsake.PST.3SG
     þis lif
     thislife
     'In this year, Oswald the blessed archbishop died.'
     (ASC, Laud (992), from: Kroch & Taylor 1997: 304, Fuß 2008: 187)

In Section 4.1, we explore the following research questions, to lay the grounds for a first tentative comparative approach to the syntax of West Germanic:

(i) Can we identify more than two projections preceding the finite verb in diagnostic V3 sequences?[35]
(ii) Can we identify the same configurations as found in (the diachrony of) German?

The data extracted for the present study will be analyzed qualitatively. A quantitative investigation on the overall occurrence of the patterns investigated is left for future research.

4.1. Empirical search
In the following, a qualitative investigation of OE data is presented, with the aim of exploring the question whether we can identify more than two projections in an extended left periphery for OE; more specifically, we investigate whether similar configurations as found in the diachrony of German can be individuated, as stated above, without the pretense of being exhaustive.

To this end, finite main clauses from non-translated texts were extracted from the YCOE corpus (Taylor *et al.* 2003) using Corpus Studio (Komen 2011) and CorpusSearch 2 (Randall 2009). Similarly as for the OHG data, where only sentences deviating from the Latin *Vorlage* were considered, we decided to consider only non-translated texts, in order to avoid possible translation effects. Furthermore, we specifically looked for light pronouns or adverbs to the right of the inflected verb,[36] whereas we searched for different combinations involving subject/object DPs or pronouns and adverbial frames to the left of the inflected verb. In what follows, some configurations found in the dataset are discussed; each example (pair) is followed by the proposed syntactic analysis. Let us start with a sequence displaying a shifting (i) and a familiar topic (j):

(68)   context:

[*On ðam timan ðe Numerianus casere$_i$ rixode, þa ferde sum æðelboren man fram Alexandrian byrig to Rome byrig, Polemius gehaten, se wæs hæþengilda; and he hæfde ænne sunu gehaten Crisantus$_j$*]
'In the time when emperor Numerianus reigned, a noble man from the city of Alexandria travelled to Rome, he was called Polemius and was a heathen. He had a son called Crisantus'
clause:

[*Se*	*kasere$_i$*]	[*hine$_j$*]	<u>*underfeng*</u>	*ða*	*mid*
DET.NOM.SG	emperor	he.ACC	receive.PST.3SG	then	with
fullum	*wurðmynte*				
full.DAT.SG	celebration.DAT.SG				

'The emperor received him then magnificently'
(coaelive,ÆLS_[Chrysanthus]:6.7333)

[$_{TopP}$ TOPIC$_i$ … [$_{TopP}$ TOPIC$_j$ [$_{FinP}$ t$_j$ [$_{Fin'}$ VFIN$_x$ [$_{TP/VP}$ t$_j$ t$_i$ t$_x$]]]]]

As can be seen in this example, both the nominal DP and the pronominal element in the sentence resulting from the query are active in the discourse. However, in the context preceding both sentences, the referent expressed as a pronoun in the sentence resulting from the query constitutes the aboutness topic. In the following sentence, the aboutness topic shifts and is represented by the nominal DP.

While these sequences show that more than one topic can be hosted in the OE left periphery and that these topics occur in a fixed word order (non-familiar topic > familiar topic), this type of configurations is not found in the diachrony of German (cf. Section 3 above), where only one (non-frame-setting) topic is usually found before the finite verb, or to the left of a topic marker.

This pattern seems to suggest that left-peripheral word orders in OE, differently from OHG, are either not subject to the Bottleneck Effect or that this variety features a particularly weak ban on multiple front-

ing. Indeed, it is reasonable to assume that the two arguments in (68) are not base-generated in the position in which they surface, but are moved into that specifier (irrespective of whether the lower pronominal element is cliticized to the finite verb at PF). This comes as little surprise if one considers that this pattern is historically continuous in English (^{OK}*All that is dangerous I like very much*), but not in German (**Alles, was gefährlich ist, ich mag sehr*).

Furthermore, as Catasso *et al.* (2021) have recently shown, sequences are attested in which an XP precedes a post-initial particle. The particle in question is the originally temporal adverbial *þa*, which exhibits a wide array of functions connected to discourse organization in OE (cf. extensive work by Los & van Kemenade 2006, van Kemenade 2009, Links 2018, van Kemenade & Links 2020):

(69) | & | [*hie*] | [*þa*] | <u>*wurdon*</u> | *sona* | *blinde* |
|---|---|---|---|---|---|
| and | they.NOM | þa | become.PST.3PL | soon | blind.NOM.PL |

'And they soon turned blind' (Catasso *et al.* 2021: 20)

This type of sequence is also found in the diachrony of German, but the investigation by Catasso *et al.* (2021) shows that there is a striking asymmetry between OE and OHG: the former allows for both nominal and pronominal elements to the left of the particle, which can in turn either encode a familiar of shifting topic, and be the subject or the object of the clause; in the latter, instead, almost exclusively shifting topics are attested, which are for the most part pronominal and function as the subjects of the clause.

As mentioned above, not only can shifting and familiar topics be found, but also contrastive topics. Example (70) shows a contrastive topic preceding a pronominal familiar topic:

(70) | [*þa* | *ane*] | [*we*] | <u>*rædađ*</u> | *nu* | *todæg.* | & |
|---|---|---|---|---|---|---|
| DET.ACC.SG | one.ACC | we.NOM | read.PRS.1PL | now | today | and |
| *þa* | *ođre* | *on* | *đysre* | *wucan* | | |
| DET.ACC.PL | other.ACC.PL | on | this.DAT.SG | week.DAT.SG | | |

'We will read that one today, and the others on this week'
(cocathom1,ÆCHom_I,_14.1:296.179.2701)

As already noted in the literature on V3 in OE (cf. Fuß 2008 or Walkden 2014, a.o.), also the pattern Adverbial > XP > Vfin is attested; usually, the adverbial is a frame and can have different syntactic realizations. In example (71), the adverbial frame bearing an additional contrastive feature, as is arguably the case in the German examples (17) and (27) above:

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(71) [Þone   fiftan   dæg]   [hi]   <u>freolsodan</u>   mærlice,
DET.ACC.SG fifth.ACC.SG day   they.NOM celebrate.PST.3PL magnificently
Ioue   to   wyrðmynte,   þam   mærestan   gode
Jove.DAT to   honor.DAT.SG DET.DAT.SG greatest.DAT.SG god.DAT.SG
'On the fifth day, they celebrated magnificently, in honor to Jove, the greatest god'
(coaelhom,ÆHom_22:174.3377)

[$_{\text{ForceP}}$ [$_{\text{FrameP}}$ {ADV$_1$} [$_{\text{TopP}}$ Top$_x$ [$_{\text{FinP}}$ t$_x$ [$_{\text{Fin}}$ Vfin$_i$] [$_{\text{TP}}$ t$_x$. t$_i$]]]]]]]

Not only is the pattern Adverbial > XP > Vfin attested; the sequence XP > Adverbial > Vfin is also found in our corpus, just as is the case in German:

(72) *And* [*he*]   [*æfter*   *þysum*   *geþance*]   *teah*
and   he.NOM after   this.DAT.SG thought.DAT.SG plant.PST.3SG
him   *elnunge*   *to*   *be*   *dæle*
he.DAT.SG comfort to   by   part.DAT.SG
'And after this thought, he took partly some comfort for himself'
(cosevensl,LS_34_[SevenSleepers]:478.359)

[$_{\text{ForceP}}$ [$_{\text{FrameP}}$ [$_{\text{TopP}}$ Top$_x$ [$_{\text{XP}}$ ADV$_2$ [$_{\text{FinP}}$ t$_x$ [$_{\text{Fin}}$ Vfin$_i$] [$_{\text{TP}}$ t$_x$. t$_i$]]]]]]]]

So far, we have seen examples of patterns involving only two constituents before the finite verb. However, further word order patterns can be found that let us postulate that the OE left periphery may host more than two constituents. In the following example, a discourse adverb introducing a new narrative section and a discourse adverb modifying the content of the utterance can be found, which in turn precede an adverbial frame and a topic:

(73) [Þa]   [æfter þære   mæssan]   [seo   modor   and
then   after   DET.DAT.SG Mass.DAT.SG DET.NOM.SG mother and
seo   *dohtor*] *astrehton*   *hi*   *on*   *gebedum*
DET.NOM.SG daughter prostrate.PST.3PL REFL   in   prayer.DAT.PL
æt   *þære*   *byrgene*
at   DET.DAT.SG city.DAT.SG
'Then after the Mass the mother and the daughter prostrated themselves in prayers before the city' (coaelive,ÆLS [Lucy]:20.2178)

[$_{\text{ForceP}}$ Þa [$_{\text{FrameP}}$ ADVERB [$_{\text{TopP}}$ DP$_x$ [t$_{\text{xFinP}}$ [$_{\text{TP}}$ t$_x$…]]]]]]

This sentence is introduced by the originally temporal adverbial *þa*, which in this case does not trigger V2, but given its function and the literature (Los & van Kemenade 2006) on this discourse adverb, it is located in Spec,ForceP. It could be hypothesized that in the case of example (73) this element is a simple temporal adverbial and does not have therefore the same discourse adverbial function as its homophonous counterpart triggering strict V2. However, as can be seen in (73),

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a temporal frame immediately follows the adverb *þa*, rendering a purely temporal interpretation of it redundant. Finally, in the contexts under consideration, the adverbial performs a similar discourse-narrative function as argued for by van Kemenade & Los (2006). In example (74), we find a sentential adverb, followed by a frame and the topic:

(74) [*Witodlice*] [*æfter dære godcundnysse*] [*he*] *hæfde*
in_truth after DET.DAT.SG divinity.DAT.SG he.NOM have.PST.3SG
æfre þisne andweald buton anginne
ever this.ACC.SG power.ACC.SG without beginning.DAT.SG
'Truly, according to his divine nature, he always had this power without beginning'
(cocathom2,ÆCHom_II,_25:207.43.4586)

[XP CLAUSE-EXTERNAL ADVERB/MARKER [ForceP [FrameP ADV[TopP Pronounx
[FinP tx [TP tx…]]]]]]

Moreover, we find word order patterns with a possibly clause-external connective, followed by an argument and an adverbial:

(75) & [*naþelæs*], [*for eallum þissum griðe & friðe*
andnonetheless for all.DAT.SG this.DAT.SG truce.DAT.SG and peace.DAT.SG
& gafole], [*hi*] *ferdon æghwede flocmælum*
and tax.DAT.SG they.NOM fare.PST.3PL everywhere in_companies
'and nevertheless, despite the truce and the tributes, they fared everywhere in companies'
(cochronE,ChronE_[Plummer]:1011.12.1810)

Finally, as extensive research has shown (Traugott 2007; Los & van Kemenade 2006; van Kemenade & Meklenborg 2022, a.o.), correlative patterns are also attested in OE. In the following, we find examples of pronominal resumption (cf. (76), which is ambiguous between a hanging-topic and a left-dislocation interpretation) and some examples of adverbial resumption, as in (77):

(76) [*Michahel se heahengel se wæs*
Michael DET.NOM.SG archangel DET.NOM.SG be.PST.3SG
ealra engla ealderman], [*he*] *wæs*
all.GEN.PL angel.GEN.PL chief he.NOM be.PST.3SG
ymen singende mid eallum þæm englum
hymn.ACC.PL singing with all.DAT.PL DET.DAT.PL angel.DAT.PL
'Michael the archangel, who was the chief of all the angels, he was singing hymns with all the angels'
(coblick,LS_20_[AssumptMor [BlHom_13]]:147.153.1802)

[HT [HANGING TOPIC] [ForceP [TopP [RES]x [FinP tx [Fin° VFINi] [TP/VP … tx … ti]]]]]
[ForceP [TopP DISLOCATEx … [FinP [RES]x [Fin° VFINi] [TP/VP … tx … ti]]]]]

(77) & [*mid þy þe hie þis gesprecen*
and with DET.INSTR COMP they.NOM this.ACC.SG speak.PTCP

hæfdon], [*þa*] <u>*com*</u> *þær* *se* *eadiga* *Iohannes*
AUX.PST.3PL then come.PST.3SG there the.NOM.SG blessed.NOM.SG John
'And as they had spoken this, then the blessed John came there'
(coblick,LS_20_[AssumptMor [BlHom_13]]:143.93.1749)

$[_{ForceP} [_{FrameP} [DISLOCATE]_x \ldots [_{FinP} [RES]_x [_{Fin'} VFIN_i] [_{TP/VP} \ldots t_x \ldots t_i]]]]$

Summarizing, we have seen that the configurations addressed for the diachrony of German are also attested in OE, but we have also shown that the OE left periphery can host sequences in which a shifting or contrastive topic precedes a familiar topic, which are not attested in German. In 4.2, these data are tentatively formalized pursuing a cartographic approach as in 3.3 above for German.

4.2. The fine-grained structure of the OE left periphery: a tentative analysis

As can be seen from the qualitative investigation presented above, there is reason to believe that the OE left periphery is adequately analyzed by adopting a cartographic approach. In fact, not only do we find sequences in which two constituents precede the finite verb, as previous investigations have already shown (Fuß 2008, Speyer 2010, van Kemenade & Westergaard 2012, Walkden 2014, 2017), we also find sequences in which more than two constituents precede the finite verb.

Moreover, by adopting the same diagnostics and methodology employed for the diachrony of German, interesting parallelisms emerge. For instance, both languages display the possibility of fronting an XP followed by an adverbial frame, or and XP followed by a topic marker. These parallelisms have so far escaped the attention of scholars since different methodologies and accounts were employed to analyze the two West-Germanic languages.

At the same time, interesting asymmetries emerge. In fact, as already the investigation by Catasso *et al.* (2021) has shown, the OE left periphery can host both shifting or contrastive and familiar topics, also simultaneously, whereas the OHG left periphery seems to allow only for shifting topics in pronominal form, when followed by a topic marker.

Furthermore, the present analysis has highlighted that the sequence shifting Topic > familiar Topic is not only attested when a topic marker is also present in the left periphery, but independently of that. These sequences are not attested in OHG, a fact which opens up the question as to whether the OHG left periphery would activate only one TopP at a time (cf. Walkden 2017 for the possibility of activating different strands of an extended left periphery).

We propose a tentative syntacticization of the OE left periphery, to be explored and refined in future investigations:

(79)   [FrameP/Sent. Adv./HT [ForceP [FrameP [ShiftTopP [ContrTopP [XP/Adjunct [FamTopP [FinP [TP …]]]]]]]]]

Finally, the idea that also the history of English exhibits basic continuity with respect to the activation of the left periphery has also been put forth by Fuß (2008), Walkden (2017) and Bruening (2016). The scholars mentioned notice for example that what has changed in the history of English is the possibility of inverting subject and verb when a non-operator is fronted (Fuß 2008: 191), a pattern which was attested in OE but not in PDE. As Haeberli (2002a) notes, OE not only exhibits patterns in which subject and verb are inverted when a non-operator is fronted, also cases where there is no inversion, as in PDE. Furthermore, other word order patterns attested in OE are also attested in PDE – *mutatis mutandis*. Given the word order patterns illustrated in Section 4.1, it remains to be investigated how we can think of the left periphery in English as displaying basic continuity and how changes affecting, for example, the system of discourse particles (cf. van Kemenade 2009, van Kemenade & Links 2020) or the subsequent loss of V2 in the course of the late ME period bear on the complexity of the left periphery delineated in this brief section.

Summarizing, the present investigation has highlighted new patterns possible in V3 sequences in OE, without the aim of being exhaustive, but to open up questions for future studies.

5. Conclusions

This paper focused mainly on V3 word order patterns in the history of German. The patterns were extracted adopting a very strict methodology, a 'zero-tolerance approach' (Catasso 2021b). This approach, which is unprecedented in the study of the phenomenon – at least with the aim of devising a comprehensive typology of V3 for all language stages of German, and with the due specification that it was Axel (2007) who first proposed a number of valuable tests to diagnose verb movement in OHG –, has made it possible to analyze the V3 sequences in a consistent and comparable manner. The investigation thus conducted has shown that there is a sort of basic continuity throughout the history of German as far as V3 patterns are concerned.

In the last section of the paper, the same approach adopted for OHG was tentatively extended to a pilot corpus of OE main clauses in order to get a first impression of the comparability of OE and the oldest language stages of German. This has highlighted both interesting parallelisms and asymmetries. In fact, in light of the data extracted In the present study, it remains to be investigated to what extent also the

English left periphery shows a 'basic' continuity, as argued for by Fuß (2008), Bruening (2016) and Walkden (2017). A thorough quantitative investigation can furthermore shed light on the question whether the asymmetries found between the OE and the OHG left periphery justify the assumption that these are structurally dissimilar.

Abbreviations

1, 2, 3 = first, second, third person; ACC = accusative; AUX = auxiliary; COMP = complementizer; DAT = dative; DET = determiner; ENHG = Early New High German; *FnhdC* = Bonner Frühneuhochdeutschkorpus; GEN = genitive; INF = infinitive; INSTR = instrumental; ME = Middle English; NOM = nominative; OHG = Old High German; OE = Old English; PDE = Present-Day English; PDG = Present-Day German; PL = plural; PRS = present; PRT = particle; PST = past; PTCP = participle; *ReA* = Referenzkorpus Altdeutsch; REFL = reflexive; *ReM* = Referenzkorpus Mittelhochdeutsch; RES = resumptive; SG = singular; V1 = Verb-First; V2 = Verb-Second; V3 = so-called Verb-Third (or verb-later); VPRT = verb particle.

Notes

[1] Part of the research presented in this paper was conducted in the project *Lizenzierungsbedingungen für deutsche Verb-Dritt-Sätze in der Diachronie* carried out at the University of Wuppertal (Germany) and funded by the Deutsche Forschungsgemeinschaft (DFG) (project number: 376919537, duration: 2017-2021). Nicholas Catasso is responsible for Sections 2 and 3, Chiara De Bastiani for Sections 1 and 4. Section 5 is a collaboration between both authors. We thank two anonymous reviewers for valuable suggestions and comments on an earlier version of the manuscript.

[2] To be sure, Behaghel (1932: 13) already mentions that OHG and OE exhibit similarities with respect to the placement of the finite verb in non-V2 position in main clauses under certain conditions: "*Im ältesten Ahd. steht wie im Ae. das Verbum nicht an zweiter Stelle, wenn der Satz außer dem einleitenden Wort noch unbetonte Wörtchen enthält* […]" ('In early OHG – like in OE –, the verb does not appear in second position when the clause contains unstressed particles besides the first word in the clause […]'). This is, in fact, one of the instantiations of V3 – but not the only one – that will be discussed in what follows. For further mentions of this parallelism in the recent literature, see Fleischer & Schallert (2011: 153-156).

[3] An anonymous reviewer points out that the investigation should have included some of the late-OHG texts by Notker, which can also be consulted in the *Referenzkorpus Altdeutsch*. These data were in fact also collected, but they are not discussed in the present work for a number of reasons. In the first place, Notker's texts are of scientific and/or philosophical nature and mainly feature pronominal and adverbial resumptions – i.e. they do not contain additional patterns not appearing

either in Early OHG or in MHG and mostly lack those V3 patterns that typically occur in narrative texts (both in Early OHG and MHG) and involve, for instance, topic shift ('Topic > Topic particle > Vfin') or orders of the type 'Frame-setting topic > Argument > Vfin'. Furthermore, Notker exhibits stylistic and structural peculiarities (i.e. concerning the relation between the German and the Latin text) that ought to be addressed overtly in a dedicated paragraph. In order to have a balanced sub-corpus for OHG, we leave the discussion of the Notker data for future work.

[4] For the purposes of replicability, a search string like the following was used, in which 'X' and 'Z' refer to the criteria defining clause types in the *ReA* (e.g.: 'CF_U_M' is the category that identifies syntactically independent clauses that do not function as a non-first conjunct in a syndetic coordination), while 'Y' and 'K' are different parts of speech (e.g.: 'NA' is the abbreviation for 'common noun'): clause = 'CF_X_Z' & pos = /.*FIN/ & pos = 'Y' & pos = 'K' & #1_i_#2 & #3.#2 & #4.#3. Note that the part-of-speech-internal variation (e.g. the differentiation between common and proper nouns) was also considered.

[5] The symbol $<\cdot>$ appearing in ex. (8), a graphic variant of so-called *punctus suspensus* ('floating dot'), is used in the edition consulted for the OHG data to signal the beginning and the end of a syntactic unit (generally, a constituent). It is not to be confused with the similar so-called *interpunct* of the Classical Latin tradition, used to separate single words.

[6] It should be mentioned, however, that the MHG (like the ENHG) digital corpus in the majority of cases does not provide the entire text, but snippets of about 30-40 pages of the respective sources.

[7] Any type of empirical comparability between historical and present-day data necessarily requires some degree of speculation. For instance, no or very little decisive information is available about the prosodic contours characterizing the different left-peripheral patterns attested in Historical German. In the next sections, we will primarily investigate the question of whether patterns are found in the pre-modern periods that match those of PDG and contend that it is at least plausible that the relevant constructions – which appear to be marked both in Historical and PDG – might have been present in the system throughout the history of German. Of course, we do not mean to imply that they have preserved their original status, distribution and formal characteristics in the very same way in all periods of the language.

[8] An argument in favor of this assumption comes from the fact that these two types of adverbials can be coordinated, which suggests that they occupy the same position in the left periphery:

(i) *dâr nâch   unde ir   der   triuwe   dienest ab   gienc*
    after_that and   before the.NOM.SG   faithful.NOM.SG duty   VPRT   end.PST.3SG
    dô   erblindete   sie
    dô   go_blind-PST.3SG   she.NOM.SG
    'After that and before her faithful duty came to an end, she lost her eyesight'
    (*Engelth.* 063,19-21, from: Catasso 2021c: 22)

[9] Breitbarth (2023) presents a different perspective on this, suggesting that the pattern illustrated in (19) is more likely to be an innovation in the system. It cannot be excluded that both hypotheses are on the right track and that the data in (16-18) on the one hand and data of the type in (19) on the other hand are not instantiations of one and the same phenomenon although they look very similar. If that were the case, we would be dealing with a diachronic decay and later reanalysis of the same pattern. We leave this question for future research.

[10] Cf., for instance, the following examples from ENHG (i) and PDG (ii), respectively, in which the lower left-peripheral constituent is an adverbial clause. This further corroborates the assumption that at least with respect to the phenomenon addressed in this paper and at least for (Historical) German, clausal and non-clausal adverbials

should not be treated as different categories:

(i) *Volodimer weil   er   Khiow belegert/   schickht   sein*
     Volodimer when   he.NOM Kyiv   besiege.PST.3SG   send.PST.3SG his.ACC.SG
     haimblichen   Potten   zu   BLVD
     secret.ACC.SG messenger.ACC.SG to   Blud
     'When Volodimer besieged Kyiv, he sent his secret messenger to Blud.' (*Mosc.* B4 r., 13-14)

(ii) *aber der   Mann, obwohl   er   gern   die   Rolle   des*
     but   the.NOM.SG man   although he.NOM.SG gladly the.ACC.SG role   the.GEN.SG
     weisen   Nathan   spielt,   schien   mir   immer   leidlich
     wise.GEN.SG Nathan   play.PRS.3SG seem.PST.3SG I.DAT   always tolerably
     vernünftig
     sensible
     'But her husband, although he likes to play the role of the wise Nathan, always seemed to me tolerably sensible.' (V. Klemperer 2020, *LTI: Notizbuch eines Philologen*, p. 34)

[11] The clause-internal or -external position of adverbial clauses in first position is one of the most controversial issues in German(ic) syntax. In a nutshell, our take on this complex question is that this is not an all-or-nothing situation. Adverbial clauses, just like virtually any other constituent, can behave like hanging-topic-like phrases given the appropriate conditions, but they can also be fully integrated XPs in other contexts. Therefore, depending on its role in the utterance and its interpretation, an adverbial clause can be either base-generated above ForceP and pronounced in that position, or function as the element that interacts with the V2 syntax of the clause and satisfies the EPP-like feature on C. This can be shown for PDG by considering the prosodic contour and word order of the utterance, the relative position of the adverbial clause with respect to very high left-peripheral (or even clause-external) discourse particles or expressions, etc. Accordingly, the temporal clause in (i) can be assumed to be first-merged clause-externally; however, the adverbial structure in (ii), which has exactly the same form as in (i), is more plausibly moved into Spec,CP:

(i) [*Als   wir   jung   waren*] –   *naja, du   weißt   schon,*
     when we.NOM young   be.PST.1PL   well you.NOM know.PRS.2SG PRT
     wir   wollten   halt   Spaß   haben.
     we.NOM want.PST.1PL PRT   fun   have.INF
     'When we were young – well, you know, we just wanted to have fun.'

(ii) *Naja, du   weißt   schon,* [*als   wir   jung   waren,*]
     well you.NOM know.PRS.2SG PRT   when we.NOM young   be.PST.1PL
     wollten   wir   nur   Spaß   haben.
     want.PST.1PL we.NOM just   fun   have.INF
     'Well, you know, when we were young, we just wanted to have fun.'

[12] As recently pointed out by Haegeman & Greco (2018: 35), the clause-internal *vs* clause-external base-generation of the projection hosting frame-setting elements has become an issue of debate in the last decades. While some authors, like Benincà (2006), assume that this projection is situated below ForceP, others, like Poletto (2002), propose models in which this position is extrasentential. We do not exclude either of these two options. It may even be the case that both are present, parallel to the distinction between hanging topics (which are generally assumed to be clause-external) and left-dislocated topics (which are moved elements).

[13] An anonymous reviewer legitimately objects that the idea of two projections bearing the same label could be considered rather uncartographic. We agree with that. In fact, the two positions assumed here, as also illustrated in examples (20-23) and (24) below, seem to be associated with slightly different [+Frame] features: in our data, the lower position hosts arguably unstressed, informationally non-prominent frame setters; in the higher specifier, instead, frames appear that can also be interpreted

contrastively. It seems reasonable to speculate that the base-generation of this type of material in the higher projection corresponds to a reanalysis of the frequent movement of frame-setting constituents from the middle field to the CP area into base generation in the left periphery. This is in line with general tendencies of syntactic grammaticalization as economy (cf., e.g., van Gelderen 2004, 2009).

[14]   In spite of this, according to Breindl (2008: 46-47) this is more of a written language pattern occurring especially with subjects, because it helps the reader where prosody cannot distinguish the information-structural functions.

[15]   In the modernized transcriptions present in the *ReM*, the symbol $< = >$ is used to indicate that, in the original manuscript, the two parts of the word separated by it appear in two different lines.

[16]   Note that in this formal representation, we abstract away from a more precise terminological characterization of the projection hosting the moved phrase and from the underlying operations leading to this linearization. Given, for instance, the data in (27) and (28), it cannot be excluded that the derivation of this constituent includes a more complex path into its landing site. It could be the case that after deriving the Bottleneck Effect in Spec,FinP, the XP must first move to TopP/FrameP specifier to acquire the corresponding features and then be further raised to some higher specifier hosting contrastive topics (e.g. Frey's 2004a KontrP), in whose head the particle might be generated. Something similar could be assumed for structures in which the item in post-initial position follows a *wh*-interrogative (e.g.: *Was aber sollen wir jetzt tun?*, lit. 'What however shall we now do?'), where the *wh*-element might be moved into Spec,WhP and then into the specifier of a KontrP-like projection.

[17]   Note that in the MHG and in the ENHG example, sentence-initial *ja* is not the answering particle meaning 'yes', which has the same form as in PDG. Of course, this can only be determined by looking at the context.

[18]   Also cf. Petrova's (2017: 307) corpus study of particles in OHG: "Of these [particles], we find rare vestiges in […] Middle High German […] until these elements completely disappear from the system of the language towards modern times."

[19]   To be sure, *ja* is not the only left-peripheral sentence particle attested after the OHG period. Sporadically, other particles (also items that are part of the lexicon of PDG as modal particles) are found in the same position with a comparable function. Consider, for instance, the following MHG example, in which the particle *halt* (cf. the PDG modal particle *halt*) precedes the PP situated in the prefield:

(i)   *und halt in allen   irem   lebene …   tet   ir*
      and PRT in all.DAT.SG her.DAT.SG life.DAT.SG do.PST.3SG she.DAT
      got   keine   sunder genâde   niht
      God   no.ACC.SG great   grace   not
      'and during her life, God was not particularly merciful upon her.' (*Engelth.* 058,04-06)

[20]   As discussed by Trotzke (2018), the same *ja* can also function as a DP-internal modal particle. In the cases considered in the present paper, the scope of the particle is clearly a whole utterance and not a DP, but the way it modifies the semantics of its structural host is the same. In particular, "the intensifying *ja* reasserts the things already said in order to further reaffirm them by adding what follows. The intensifying *ja* affirms, it confirms both the preceding and the following material in an enumeration; it is thus a speech act particle performing an illocutionary act" (Burkhardt 1982: 357, translation by Andreas Trotzke 2018: 326).

[21]   It should be noted, however, that despite a substantial semantic equivalence, sentences containing left-peripheral *ja* and sentences containing middle-field *ja* differ from each other stylistically. Since the former is a (diachronically) residual element, it comes as little surprise that it is limited to some contexts of written German and/or to high registers, while the latter is productive in most communicative contexts.

[22]   Note that the labels inuP, nuP and jaP in the example above only have an illus-

trative function. It is compelling to assume that the highest left-peripheral position, ForceP, consists of more than one specialized sub-projection, as has independently been proposed by Coniglio & Zegrean (2011) (in their formalization, ILL for illocution and CT for clause-typing), and that each of these projections hosts one of these particles. The details of this approach are left to future research.

[23] In fact, sentence adverbs taking scope over the entire sentence are attested in utterance-initial position in V3 configurations throughout the history of German. A parallel pattern that is frequently attested in our corpus consists in a V3 clause introduced by an evaluative (i) or epistemic (ii-iii) adverb followed by an XP preceding the finite verb. For the reasons made explicit above, these structures can be assumed to behave in a very similar way to the other ones addressed in this section:

(i) MHG

... [*leider*]	[*sine*	*schulde*]	*chert*	*er*	*gar*	*uf*
regrettably	his.ACC.SG	fault.ACC.SG	shift.PST.3SG	he.NOM	only	on

sin	*wip*
his.ACC.SG	wife

'... alas, he blamed his sin on his wife.' (*Spec*. 05r,03-04)

(ii) ENHG

[*Fůrwar/*]	[*er*]	*trug*	*vnser*	*Kranckheis*
in_truth	he.NOM	bear.PST.3SG	our	sorrow

'In truth, he bore our sorrow.' (*Pass*. 33v,20)

(iii) PDG

[*Gewiss,*]	[*in*	*dem*	*ein*	*oder*	*anderen*	*Sachthema*]
certainly	in	the.DAT.SG	one	or	other.DAT.SG	topic

demonstrierten	*Pippins*	*Söhne*	*Einigkeit.*
demonstrate.PST.3PL	Pepin.GEN	son.NOM.PL	unity

'Certainly, Pepin's sons demonstrated unity in some decisions.' (*Der Spiegel* 2/2018, p. 21)

[24] In our corpus we have found only one single exception to this, namely the following OHG sentence from *Tatian*, which we do not consider significant enough to assume that this pattern must have been productive in this or in any language stage of German. This sentence might constitute an exceptional violation either of the ban on the extraposition of light pronouns in verb-final main clauses (cf. 2.2.1) or, alternatively, of the multiply filling of the prefield in sentences exhibiting V-to-C movement. Of course, it cannot be excluded that the position of the negative indefinite pronoun replicates the word order of the source:

(i)

her	*tho*	*niouuiht*	*antlingita*	*imo*
he.NOM	PRT	nothing	answer.PST.3SG	he.DAT

'He did not reply to him'
at ipse nihil illi respondebat (*T*. 307, 25)

[25] To be sure, this is true of all resumptive patterns, but not of *so*-resumption in PDG, which is instead typical of high registers (cf. Catasso 2021c).

[26] In the edition consulted for the present study, the notation <.'>, consisting of a dot and a single inverted comma (so-called *punctus elevatus* 'raised dot'), is used to signal a short pause between two segments (words or constituents).

[27] Of course, a number of additional aspects concerning the acceptability and distribution of these patterns must be regarded when considering non-canonical patterns in sources that are exclusively attested in written form due to the period in which they emerged. Many of the constructions illustrated above for Historical German have survived in the system, but are possible only in spoken and/or colloquial interaction in PDG. In the corresponding (written) text genres consulted e.g. for MHG and ENHG (sermons, chronicles, etc.), V3 would be a dispreferred option in most cases; however, this does not result from systemic factors, but rather from generally accepted textual norms.

[28] In (colloquial) PDG, a pattern like this – assuming that option (ii) applies – would correspond to a structure in which the hanging topic and the adjunct perform the function of introducing two referents in the discourse that are realized as 'detached elements' whose position does not result from movement. In a configuration like this, a prosodic break would be necessary between these two XPs and the rest of the clause:

(i) *Boah,* [*die*   *Maria*] (–) [*gestern*] – *sie*   *war*   *so*   *stinkig!*
    woah the.NOM.SG Maria   yesterday   she.NOM be.PST.3SG so   angry
    'Woah, Maria was really angry yesterday!'

[29] Note, however, that the study carried out by Catasso *et al.* (2021) does not make use of the same diagnostics as the present research.

[30] Links (2018) and van Kemenade & Links (2020) show in fact that these particles, when found in clause-internal position, act as discourse particles expressing e.g. surprise on part of the speaker.

[31] Also cf. van Kemenade & Meklenborg (2022), who propose a split CP-account in which the verb moves as high as Force° in strict V2 contexts and to Fin° in verb-later contexts.

[32] The account put forth by Pintzuk (1999), according to which object pronouns can be analyzed as procliticizing to the finite verb, has been challenged by Bech (2001).

[33] Fuß & Trips (2009) argue instead that the Spec,TP position was not associated with EPP features in OE, but rather with anaphoricity and specificity. However, this does not invalidate on the assumption that an extended left periphery for OE can be assumed, especially for cases like in (62), where two topics are found before the inflected verb. Even if we assume that the verb has not left the TP, and that one topic is located in Spec,TP, one has to assume that the second topic has moved to a higher position in the extended left periphery. This analysis would not be compatible moreover with examples like (72), where the subject pronoun precedes both a frame adverbial and the finite verb.

[34] In principle, if one assumes an OV base for OE, the DP can be analyzed as being extraposed. Despite the fact that one of the authors of the present chapter has actually argued for a uniform VO base order for OE elsewhere (cf. De Bastiani 2020, 2022), we constrained the dataset in a way in which the word orders examined involve unambiguous verb movement under different theoretical accounts (cf. van Kemenade 1987, Pintzuk 1999, among many others, for two different accounts on OE word order).

[35] In the literature quoted, linear (i.e. surface) V3 orders are usually taken into account where two constituents precede the finite verb. In this paper, we also take into account verb-later configurations showing diagnostic V-to-C movement and assume that the verb is moved to the left periphery, given the discussion in Walkden (2017, 2021). We exclude verb-final sentences in order to adopt a uniform methodology with respect to the German data, and in order to exclude all possible ambiguous structures. Therefore, when referring to V3, we will refer also to verb-later arrangements, in a similar fashion as to the data for Historical German.

[36] Pintzuk (2002, 2005) also lists verb particles among the diagnostics for head-initial structures; in other words, if a particle is found after the finite verb, it can be concluded that the verb has been moved. However, Los *et al.* (2012) argue that verbal particles were not completely grammaticalized during the OE period, and retained in several contexts lexical meaning and possibly carried prosodic accent. Therefore, they were not employed in the present study as diagnostics.

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