CHAPTER 26

Synthesis: Peripheries in Germanic Languages: A Comparison with Romance

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Abstract The present article provides a comparison of the left peripheries of Romance and Germanic. It combines evidence from German and Dutch with evidence from the Scandinavian languages to reach a map of the C-domain in Germanic. A special focus, thereby, is paid to the proper characterization of V2 in an extended C-domain. Furthermore, it provides an intonational and information-structural description of the right periphery in German and Dutch and argues that its properties can be best explained by assuming parametrically conditioned vP-intraposition.

Keywords topics – focus – V2 – bottleneck effect – extraposition – right-dislocation – prosodic conditions

1 Introduction

Ever since the seminal work of Rizzi (1997) on the split CP in Italian, the question has arisen how the C-domain in Germanic languages is configurated and whether it shows a similar complexity, as is arguably displayed by the Romance languages.

Before Rizzi (1997), work on the Germanic C-domain was concentrated on properly characterizing the V2-property and phenomena connected with it, like the questions which properties license embedded V2 or which factors allow or disallow for a doubly-filled Comp-position. The theoretical background of these studies was the assumption that the C-domain in Germanic consists of a single head – needed anyway for clausal embedding – namely Comp (C^{o}) and that the V2 property can be best accounted for by assuming that the finite verb moves up to C^{o} that is endowed with an EPP-feature, requiring its Specifier to be filled by a lexical XP.

These assumptions explained very well the strict second-position effect of V2 and the multi-purpose nature of the initial position in Germanic languages. It is

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well-known that the initial position in V2-clauses in modern German and Dutch is syntactically and information-structurally unrestricted, in that it can host a) all types of syntactic categories (comprising DP-subjects and -objects, prepositional objects and adjuncts, as well as adverbials and all types of embedded clauses) and b) both focused elements, like wh-phrases, and topics.

1.1 The Left Periphery (LP) in German and Dutch

De Vries and Zwart, in their discussion of the LP in West Germanic, start out with the observation that typical occupants of the LP in German and Dutch are wh-elements, topics, subjects, and 'high' adverbs and note at the same time that the LP typically can host just a single category, as the finite verb 'skips over' other potential occupants of the LP in realizing the V2 pattern. This raises the question of whether West Germanic displays the restriction of only a single constituent in front of the finite verb – despite the presence of various functional heads in the C-domain – because these languages observe the V2-property, or whether it displays this restriction because there is only one syntactic head in the C-domain, which is occupied by the finite verb (in main clauses and subordinate clauses with root properties), and the specifier of which is filled by one constituent due to the EPP-feature of this head.

In their empirical survey of phenomena in the LP in West Germanic, De Vries and Zwart arrive at the conclusion that the LP in these languages comprises two positions: a functional head for licensing wh-elements on top and a functional head for licensing topics below it. They also point out, referring to work by Speyer (2019), that the (single) topic position appears to have started out as a position for aboutness topics in Old High German but then gradually weakened to a position for all elements that can be seen as connecting the sentence to the discourse (bridging elements) in Early New High German. They leave the question unaddressed as to how the V2-property is observed in a C-domain with two functional heads. They seem to assume that the finite verb moves into the highest head that is activated in the derivation, that is to say, to the higher head in wh-questions and to the lower topic head in standard declaratives. This analysis is implied by their treatment of clause-initial subjects (including weak subject pronouns), which they analyze as occupying [Spec,TP]. In other words, clause-initial subjects are not analyzed as topics by them. I will briefly discuss their empirical observations here and will come back to the historical development of the C-domain in German in Section 2.1 below.

Illustrating some of the empirical observations by de Vries and Zwart, it is important to note that subjects, including weak, both referential and expletive pronouns, can occupy the clause-initial position, as is illustrated in (1). This is remarkable since weak object pronouns are excluded from this position, as is illustrated in (2). (2a) is only good if the pronoun receives a special stress, but an unaccented object

pronoun is ungrammatical. Note that the problem in (2b) cannot be the clitic status of the object pronoun, since the clitic subject pronoun in (1a) is completely grammatical.

(1) a. *S'hat geregnet.* (German)
it-has rained
'It has rained.'

b. *Er staat een paard in de gang.* (Dutch)
it stands a horse in the corridor
'There is a horse in the corridor.'

(2) a. **Ihn hat er eingeladen.* (German)
him has he invited
intended: 'He has invited him.'

b. **T'wist ik niet.* (Dutch)
it-know I not
'I do not know it.'

Thus, object (personal) pronouns need to be marked with stress and have to assume a special discourse role as a contrastive topic or as a contrastively focused element to skip over the subject. No such restriction seems to apply to demonstrative pronouns, that de Vries and Zwart treat as one example of elements that are subject to topicalization, as is illustrated in (3).

(3) a. *Die kann ich schon gar nicht leiden.* (German)
DEM.F.SG can I PTCL at.all NEG suffer.INF
'I cannot stand her at all.'

b. *Dat wist ik niet.* (Dutch)
DEM.N.SG know I NEG
'I do not know it.'

It is not entirely clear what distinguishes the cases in (2) from the cases in (3). De Vries and Zwart point out that these demonstratives are unstressed pronouns. One could assume that demonstratives count as aboutness topics, even if unstressed, while personal pronouns need to be stressed in order to count as aboutness topics; otherwise, they are treated as familiar topics (cf. the definition of various topic types in Frascarelli and Hinterhölzl 2007).

It is important to note that demonstrative pronouns are used to unambiguously refer to the less salient discourse referent, while the use of two personal pronouns, despite the preference of the higher pronoun referring to the subject antecedent, results in ambiguity, as is illustrated in (4). Topicalization of the demonstrative pronoun can then be used to indicate that the less salient discourse referent functions as the aboutness topic, as is illustrated in (5). Otherwise, the aboutness topic will be equated with the most salient constituent in the sentence, which, in most cases, is the subject.

(4) a. *Hans traf gestern Otto. Er hat ihn auf einen Kaffee eingeladen.*
Hans met yesterday Otto he has him For a coffee invited
'Hans invited Otto for a coffee.' / 'Otto invited Hans for a coffee.'

b. *Hans traf gestern Otto. Er hat den auf einen Kaffee eingeladen.*
'Hans invited Otto for a coffee.'

(5) *Hans traf gestern Otto. Den hat er auf einen Kaffee eingeladen.*
Hans met yesterday Otto that.one has he for a coffee invited
'Hans met Otto yesterday. Hans invited Otto for a coffee.'

If the C-domain in Germanic comprises various heads, then the question arises of how to properly characterize strict linear V2. Furthermore, the question arises which of the positions that have been proposed for Romance languages are relevant or necessary to assume for Germanic. For instance, De Vries and Zwart note that frame adverbials are also frequent candidates for the LP, but they do not assign a special position to frame adverbials (being hosted in the unique topic position that they seem to assume). This does not only raise the question, what happens if a sentence displays a frame topic and an aboutness topic – for instance, one may wonder which one takes precedence over the other – but also falls short of accounting for V3 orders in West Germanic that appear at various historical stages but also occur in modern varieties, as De Vries and Zwart point out for West Flemish (cf. Haegeman and Greco 2017), illustrated in (6). They analyze (6) as a case of topicalization without Verb Second.

(6) *Oan-k toe kwamen de deure stand open.*
when-1SG back came the door Stood open
'When I came back, the door stood open.'

Thus, the important question remains of how V2 is to be characterized in West Flemish and other varieties that display V3 orders in declarative clauses. It should be noted that the first element typically constitutes a frame adverbial and that the

second constituent is almost exceptionless the subject. We will come back to the analysis of V3 orders in West Germanic in Section 2.4 below.

As far as focused constituents are concerned, De Vries and Zwart note that fully discourse-new material appears to be systematically absent in the LP, pointing out that focus is indicated prosodically (with a pitch accent) and not with word order in the (continental) West Germanic languages. As far as new information focus is concerned, this seems to be, by and large, true, since this type of focus is realized in the base position in Standard German, as is indicated in (7B) below. One notable exception is Bavarian, as is illustrated in (7A). Cases like (7A) are not reported to be used in the Standard language, begging, however, the question of whether the difference between Bavarian and the Standard is more minimal as is normally assumed, since constituent answers in the standard language can be analyzed parallel to clausal answers in Bavarian, by not allowing de-accentuation, but requiring deletion of the rest of the clause, as is illustrated in (7B").

(7) Q: *Wen hat Peter zur Party eingeladen?*
whom has Peter.NOM to.the Party invited
'Who did Peter invite to the party?'

A: *Die Maria hat er eingeladen.* (Bavarian)
the Mary has he invited
'He invited Mary.'

B: *Er hat die Maria eingeladen.* (Standard German)
he has the Mary invited
'He invited Mary.'

B': *Die Maria.* (Standard German)
the Mary
'Mary.'

B": *Die Maria ~~hat er eingeladen~~.*
the Mary has he invited
'Mary.'

All other types of focus in German can be realized in situ or ex-situ, as is illustrated for corrective focus in (8). As is shown in (8), there is a lot of freedom or optionality in licensing this type of focus. As we will see, this is not a special property of German, but occurs in a variety of West Germanic languages (cf. Section 1.3 below). As for the important question of how to account for this type of optionality in a restrictive system of grammar, I will come back to this issue in Section 3.2 below.

(8) A: *Hans hat der Nachbarin den Schnaps gegeben.*
Hans has the.DAT neighbor the.ACC liquor given
'Hans gave the liquor to the neighbor.'

B: *Nein, er hat der Nachbarin den WEIN gegeben.*
no he has the.DAT neighbor the.ACC wine given
'No, he gave the wine to the neighbor.'

B: *Nein, er hat den WEIN der Nachbarin gegeben.*
no he has the.ACC wine the.DAT neighbor given
'No, he gave the wine to the neighbor.'

B: *Nein, den WEIN hat er der Nachbarin gegeben.*
no the.ACC wine has he the.DAT neighbor given
'No, he gave the wine to the neighbor.'

Finally, de Vries and Zwart discuss the contrastive topic construction in Dutch, which they describe as a combination of topic and focus, as is illustrated in (9a). A contrastive topic (CT) combines with another constituent that is in focus, *zelfs Jan* 'even Jan' in (9a). De Vries and Zwart point out that this construction also occurs in embedded clauses, as is illustrated in (9b).

(9) a. *Zoelke boeken* (CT) *zou zelfs Jan* (F) *niet lezen.*
such books would even Jan not read
'Not even Jan would read such books.'

b. *dat zoelke boeken zelfs Jan niet zou lezen.*
that such books even Jan not would read
'that not even Jan would read such books.'

(9b) is remarkable since, otherwise than in German, an unstressed object may not move across the subject in Dutch. This phenomenon was treated under the heading of scrambling in the 80s and 90s since scrambling was chosen as the name for word order variation in the middle field, that is, the area below the finite verb in main clauses and below the complementizer in embedded clauses. Hence, de Vries and Zwart put this phenomenon aside. However, if the LP comprises various functional positions and the finite verb and the complementizer can be shown to occupy a high position in the LP, then the higher middle field may be analyzed as being part of the C-domain. I will take up this point in Section 2.5 below.

1.2 The Left Periphery in Scandinavian Languages

Lindahl, in her excellent survey of the LP in Scandinavian, focuses on the C-domain in Swedish, taking up the discussion of the other North Germanic languages (Icelandic, Danish, Norwegian, and Faroese) when they deviate from the patterns and generalizations found in Swedish. She discusses in detail the syntax of two types of wh-questions in these languages (namely standard information-seeking questions and reprise questions) and their structural implications. Wh-questions exhibit strict V2 order in all the Scandinavian languages, with the exception of North/West-Norwegian dialects, which allow also for V3 or V>3 orders. Lindahl shows that the verb, in these cases, does not move into the C-domain. The interested reader is referred to her chapter for more details.

She bases her analysis of Scandinavian wh-questions on the approach to V2 by Holmberg (2020), which I will briefly discuss since it comes with explicit structural assumptions about the C-domain. Holmberg (2015) addresses the question raised above, of how to characterize V2 in a system that assumes various heads in the C-domain. He proposes that V2 is a condition on movement and not a condition on linear order or structure (as has been already proposed by Benincà 2006). V2 in Holmberg (2020) is characterized by three conditions, given in (10).

(10) a. C attracts the finite verb.
b. A maximal constituent, which can be any category, must move across C.
c. Only one maximal constituent can move across C.

Holmberg's analysis is a version of the *bottleneck* approach to V2, first developed by Haegeman (1996). In this approach, the bottleneck is identified with FinP, the lowest head in the expanded C-domain proposed by Rizzi (1997). This means that every constituent that is moved into the C-domain must pass through [Spec, FinP]. Since the approach does not allow for multiple specifiers, this means that only one originally TP-internal constituent can precede the finite verb in the C-domain. However, the system crucially allows for V3 or V>3 orders with constituents that can be taken to be base-generated in the C-domain.

The structure that Holmberg proposes for the C-domain in Swedish and that Lindahl adopts in her analysis is given in (11) and will be motivated with data from topicalization types found in basically all Scandinavian languages. If the finite verb moves to Fin° only one element can precede it in the C-domain, notwithstanding that several, in (11) exactly three, functional elements could be licensed in the C-domain.

(11) $[_{\text{FrameP}}$ Frame $[_{\text{TopP}}$ Top $[\ _{\text{FinP}}$ Fin $[_{\text{TP}}]]]]$

Note that the bottleneck assumption provides an interesting alternative explanation for the multifunctionality of the first position in V2-languages. Rather than assuming a single head, which can be assigned a multitude of features, the initial constituent can be assumed to sit in a different information-structurally defined position according to the context. In (11), only three such positions are assumed, but there is no principled reason to limit them to just three. It is the bottleneck assumption that opens up the Germanic LP to the so-called cartographic approach, in which it is assumed that different positions correspond to different semantic-pragmatic functions in a categorical fashion.

The question then arises how the bottleneck approach can account for violations of the strict V2-rule in North/West-Norwegian dialects, discussed in detail by Lindahl and illustrated in (12). First note that these structures are different from V3-orders in West Flemish declaratives clauses, which can be elegantly accommodated in Holmberg's account, since frame adverbials are arguably base-generated in the C-domain. However, V3 orders in these dialects arise, since the finite verb does not move up to FinP in structures like (12). Thus, cases like (12) violate Holmberg's first condition on V2, as outlined in (10) above.

(12) *Kem tu skal møte i baren?*
who you will meet in bar.DEF
'Whom will you meet in the bar?'

The data in (12) raise important questions about the nature of V2, and they provide a challenge for basically all accounts of V2. One solution would be to assume that the finite verb indeed moves into FinP but is spelled out in a lower position, for reasons still to be determined. In Section 3.2, I will argue that differential spell-out can be a valid solution to movement processes in general that, at first glance, appear to be optional.

Let us now discuss the topicalization data that motivate the structural assumptions in (11). The generalizations made by Lindahl on North Germanic carry over to the continental West Germanic languages. Also, de Vries and Zwart discuss left dislocation and Hanging Topics but assume that Hanging Topics are not syntactically integrated into the clause. Lindahl follows pertinent work by Eide (2011) and Holmberg (2020) in distinguishing between Hanging Topic Left Dislocation (HTLD) and Clitic Left Dislocation (CLD). While in HTLD-constructions, as is indicated in (13) by the comma notation, the left dislocated element is prosodically separated from the rest of the clause (followed by a prosodic reset on the pro-form), the initial phrase is prosodically fully integrated with the rest of the utterance in cases of CLD, as is illustrated in (14).

(13) *Vargen (ja), den har vi inte sett ännu.*
wolf yes it have we not seen already
'As for the wolf, well, we have not seen it yet.'

(14) *Vargen den har vi inte sett ännu.*
wolf it have we not seen already
'We have not seen the wolf yet.'

Moreover, it is possible to insert an element like *ja* 'yes', *då* 'then', and *alltsa* 'thus' after the dislocated element in HTLD, analyzed by Holmberg as Hanging Topic markers. These elements cannot intervene between the dislocated element and the rest of the clause in CLD. Furthermore, it is assumed that the clause-initial element is base-generated in FrameP in cases of HTLD, while the clause-initial element is argued to be derived by movement out of the TP, checking V2, in cases of CLD. The pronoun in cases of CLD has to be adjacent to the initial element and is analyzed as the spell-out of phi-features in the inner topic head, while the pronoun in the HTLD construction can also occur in its base-position, if another constituent is checking V2, as is illustrated in (15).

(15) *Vargen (ja), vi har inte sett den ännu.*
wolf yes we have not seen it already
'As for the wolf, well, we have not seen it yet.'

Given that the same two topicalization constructions exist in West Germanic and that we need a position for wh-elements, which typically follow hanging topics, we can assume the following minimal structure of the LP as common to Germanic, where wh-elements are assumed to be licensed in the Focus Phrase. As we will see in Section (2), this structure is almost identical to the structure proposed by Rizzi (1997) for Italian.

(16) $[_{\text{FrameP}}$ Frame $[_{\text{FocusP}}$ Focus $[_{\text{TopP}}$ Top $[\ _{\text{FinP}}$ Fin $[_{\text{TP}}]]]]$

I will close this short summary of the discussion of the left periphery in North Germanic with Lindahl's observation that Swedish differs from the West Germanic languages in allowing unstressed object pronouns in clause-initial position, as is illustrated in (17). The pronoun *den* 'it' has no contrastive value and seems to function as a (continuing) aboutness topic. Moreover, since *the canal* is already mentioned in the previous sentence, the pronoun *den* in the second sentence is likely to be unaccented.

(17) a. *Det gick ju en stor kanal här.*
EXPL went PTCL a big canal here
'There is a big canal here.'

b. *Den har vi lagt ner rör i och …*
that have we laid down pipes in and
'We laid pipes in it and … .'

Continuous aboutness topics have a formal aboutness feature but are phonologically realized like familiar topics. I can replicate the effect in my own dialect – modulo the effect of preposition stranding that is not available in Southern German, noting that the example is fine with a D-pronoun in my Upper Austrian (18a), but degraded with a personal pronoun (18b). From the formal point of view, *den* in Swedish seems to be a D-pronoun. But to my knowledge, there is no choice between a personal pronoun and a D-pronoun (as in West Germanic). This could be the basis of the difference between North Germanic and West Germanic. I will leave this issue for further research.

(18) *Da gibt's an großn Kanal.*
EXPL exists-it a big canal
'There is a big canal.'

a. *Den haum'a in Röhrn verstaut.*
that have-we in pipes laid
'We have laid it in pipes.'

b. ??*Ihn haum'a in Röhrn verstaut.*
him have-we in pipes laid
'We have laid it in pipes.'

1.3 The Left Periphery in Two Variants of Yiddish

In her interesting paper, Szendrői compares the syntax of Standard Yiddish with contemporary Hasidic Yiddish. Standard Yiddish was a mixed OV/VO system with gender and case distinctions in the nominal domain that became a pure VO-language, losing Gender and Case distinctions in contemporary Hasidic Yiddish, but maintaining and even strengthening the original V2 character of Standard Yiddish. As far as information structure and the LP in these varieties is concerned, Szendrői shows that contrastive focal and topical material can optionally be placed in the first position or in a position left-adjoined to the vP, in addition to their in-situ position (as we have already seen for corrective focus in German above). Szendrői

points out that these observations present challenges to a cartographic treatment which is axiomatically wedded to a one-to-one mapping between position and meaning. Her argument is very important and valid in an approach to syntax in which it is assumed that the LF-position of a constituent (always) corresponds to its PF-position. I will take up her argument in Section 3.2 below and discuss in detail the ramifications of her challenge for the cartographic enterprise.

1.4 Outline of the Paper

In Section 2, I will take stock of Rizzi's (1997) proposal and discuss what it means for the proper characterization of the V2-rule. In particular, I will argue that V2 should be characterized as a complex structural and prosodic condition. I will spell out in more detail how the bottleneck effect can be captured in terms of phase-based conditions on movement. Furthermore, we will discuss the differences between low and high V2-languages and provide a diachronic argument for how the integration of clause-external topics led to the generalization of the V2-rule in German and Dutch and contributed to rendering them uniform high V2-languages. As we will see, this has major implications for decerning information-structural categories in the C-domain in these languages.

In Section 3, I will discuss the information-structural implications of the well-known observation that the initial position in V2-clauses in German can be occupied by unstressed subjects but not by unstressed objects. Furthermore, I will address the optionality problem in the placement of IS-categories pointed out by Szendrői and argue that optionality is not incompatible with the cartographic approach. In addition, I will argue that a cartographic approach is called for within a minimalist approach to syntax in so far as the latter requires movement to be triggered.

In Section 4, I will address the question of what the cartographic approach combined with minimalist technique implies for the proper analysis of the right periphery, focusing on the empirical observations made by Zwart and de Vries (this chapter) on Dutch and German.

2 The split CP and Decomposing V2

In this section, we will look at the consequences of an articulated C-domain for the analysis of V2 in Germanic and discuss the implications of a decomposed V2-rule for the positioning of IS-defined functional categories in this domain.

2.1 The Overall Picture

Rizzi (1997) put forward the proposal that various functional heads in the C-domain serve to connect the sentence with the context, that is, link up the proposition with parameters of the utterance context. The context, in modern pragmatic terms, comprises not only the speaker, the hearer, the utterance time, and the place of utterance, but crucially also information shared by the speaker and hearer, the so-called common ground (CG). The CG is updated during the discourse and thus contains – at any point of the conversation – also information previously uttered, including discourse referents that are thus assumed to be activated or salient in the discourse. Note that the Germanic languages have a class of anaphoric expressions, in essence, pronouns and unstressed definite DPs that are used to refer back to entities that are familiar in the discourse. These are the so-called familiar topics in the system of Frascarelli and Hinterhölzl (2007).

Rizzi (1997) proposed two head positions, Fin° and Force°, which span an area that comprises Specifier positions for topics and focused elements (he was not very explicit about the nature and the purpose of the Specifiers of Fin and Force), as is illustrated in (19). In the following, I will analyze FinP as constituting the right edge of the C-domain, while ForceP constitutes the left edge of the C-domain. I will also assume that the finite verb can target two positions: Fin° (so-called low V2) and Force° (so-called high V2).

Furthermore, there is good evidence that topics above Focus are base-generated, while the topics below Focus are derived by movement (cf. Hinterhölzl 2021 for arguments) in Italian. In particular, the already discussed frame topics, (shifting) aboutness topics, and contrastive topics arguably occupy the high topic field, while familiar topics (including continuing aboutness topics) occupy the lower topic field. Familiar topics are also subject to right-dislocation in Italian, while shifting aboutness topics and contrastive topics can only occupy the left periphery in Italian. There are proposals that right-dislocation should be analyzed as left-dislocation plus movement of the remnant TP to a higher position in the left periphery. We will come back to this point in Section 4 below. Note now, in particular, the similarities between the Germanic LP in (16) above and the Italian LP:

(19) $[_{\text{edge of C}}$ Force Topic* Focus Topic* $[_{\text{edge of T}}$ Fin [TP ....]]]

While Fin° was thought of as a position that licenses (the features of) the finite verb, Force° was taken by Rizzi (1997) to encode clause type. Force° has later been taken by various authors to encode illocutionary force. In particular, Krifka (2020) has proposed that illocutionary force is syntactically represented by a sequence of functional heads in the C-domain, distinguishing between a judgement phrase,

a commitment phrase, and a speech act phrase proper. The interested reader is referred to his work for further details.

For our purposes, we stick to the structure outlined in (19) and simply assume that Force° in matrix clauses possibly encodes illocutionary force, while in subordinated clauses, it is responsible for clause typing, marking, for instance, the distinction between embedded interrogative and embedded declarative clauses.

I will argue that the role of FinP is to supply the proposition with contextual values for the utterance time, the reference time, as well as with referential values for anaphoric expressions (cf. Hinterhölzl 2024). This transfer of values is thought to be achieved by the operation of upward Agree in the sense of Zeijlstra (2012). For this reason, Tense and all referential arguments enter into an Agree relation with Fin°. As we will see, a special role in this dependency is played by the subject, since, as the highest argument, it will move into [Spec,FinP] in most cases, as will be discussed in detail in Section 2.3.

Based on these structural assumptions, I will address the question of how to characterize V2 in the extended C-domain in the following section. First of all, we have to distinguish strict linear V2 from systems where the finite moves into some functional head in the C-domain without strictly obeying the linear V2 rule. The latter is generally taken to be indicated by the presence of subject-verb-inversion.

2.2 Toward a Compositional Approach to V2

While V2 has been considered to be a hallmark of Germanic languages, a growing body of evidence has been accumulated showing that the Older Romance languages exhibited a fairly robust system of V-to-C-movement (cf. Benincà 2006; Wolfe 2015), as evidenced by numerous cases of subject-verb-inversion in basically all varieties of Older Romance. The examples to illustrate this core property of V2 in (20)–(23) are taken from Wolfe (2015).

(20) *Adoncs dis le lectors mot consolatz que ...* (Old Occitan)
then said the clerk very comfortingly That
'Then the clerk said in a comforting manner that ... '

(21) *et por ce vos=pre je ...* (Old French)
and for this you=ask I
'and therefore I ask you ... '

(22) *et desque nascieron dixo el Mal al Bien ...* (Old Spanish)
and after born.3PL.PST said the Bad the Good
'and after they were born, the Bad said to the Good ... '

(23) *Vinendu lu tempu di la morti di kistu Stephanu, vinniru multi*
come the time of the deadth of this Stephan came many
pirsuni a visitari=lu. (Old Sicilian)
persons to visit=him
'When the time of death of this Stephan came, many people came to visit him.'

Older Romance, thus, displays V2, V1, and V>2 orders in declarative clauses. The conclusion of Benincà (2006) on Older Romance is that strict V2 orders typically result when there is good reason to assume that the initial constituent has been moved from the TP into the C-domain, as is arguably the case with wh-elements and focused constituents. While non V2-orders appear in clauses with various topics, which are predominantly base-generated in (modern) Romance. This observation then gave rise to the famous bottleneck effect that we will rediscuss in the next section.

Note also that recent research on older Germanic brought forward that these varieties were not categorically different from Older Romance in exhibiting V-to-C movement, while failing to respect a strict linear V2 constraint, since they allow for V1, V2, and V3 orders in the same functional domain, given that all clauses in (24) and (25) are declarative clauses (cf. Hinterhölzl and Petrova 2010; Walkden 2015), as is illustrated in (24) for Old English (OE) and in (25) for Old High German (OHG), with the data in (24b–c) taken from Haeberli (2002: 248).

(24) a. ***Com*** *þa to lande lid-manna helm.* (Beo 1623) V1
came then to land sailors.GEN protector
'Then the protector of the sailors came to the shore.'

b. *Him* ***geaf*** *þa se cync twa hund gildenra paeninga.* V2
him gave then the king two hundred golden pennies
'Then the king gave him two hundred golden pennies.'

c. *Hiora umtrymnesse he* ***sceal*** *ðrowian on his heortan.* V3
their waekness he shall atone in his heart
'He shall atone their weakness in his heart.'

(25) a. ***Was*** *liutu filu in flize in managemo agaleize.* (O I 1,1) V1
were people many in diligence in great effort
'There were many people in diligence, in great effort.'

b. *Then* ***scuóf*** *hér namon.* (T 59, 21) V2
them.DAT created he names
'He gave them names.'

c. *Erino portun ih* ***firchnussu.*** (I 157) V3
iron doors I smatter
'I will smatter iron doors.'

These observations raise the important question of how the V2 property can be characterized in systems that allow for V1 and V3 orders in the same functional domain. The answer that I will provide follows the proposal in Hinterhölzl (2017) and consists in a decomposition of the V2 rule. In particular, we need to distinguish between V-to-C movement, on the one hand, and the linear constraint that itself involves a syntactic and a prosodic part, on the other hand.

Assuming that both older Germanic and older Romance were characterized by a similar V2 system also raises the following diachronic question: Why and how did German (and Dutch) develop a generalized V2 system, but English and the Romance languages did not. I will not fully address this important diachronic question here, but refer the interested reader to a proposal made by Hinterhölzl and Petrova (2010), who present a scenario in which the reanalysis of topics plays a major role in the development of a generalized V2 rule in the history of German. The argument is worth being sketched here, since prosodically integrated topics provide an important clue for the origin of the prosodic condition that I will argue is employed in cases of strict linear V2 in German and Dutch declarative clauses.

In this scenario, topics base-generated outside of the CP were first prosodically integrated into the clause and then reanalyzed as being derived by movement from a clause-internal position, as is illustrated in (26). Note that integrated topics form a separate phonological phrase (unintegrated ones form a separate intonational phrase). In this way, the finite verb will occupy the left edge of the second phonological phrase, as is illustrated in (26c). In (26), rounded brackets indicate prosodic constituents, and square brackets indicate syntactic constituents. A-topic in (26) stands for the (shifting) aboutness topic in the framework of Frascarelli and Hinterhölzl (2007). Note also that *t* in (26) is just used for expository reasons, indicating movement or remerge, but does not constitute a commitment to trace theory.

(26) Scenario for the development of generalized V2 in German
a. (A-topic) ([$_{CP}$ V1 [$_{IP}$ … pro / pronoun …])
b. ((A-topic) (V2 [IP … pro / pronoun …])) prosodic integration
c. [CP ((A-topic) (V2 [IP …. t / resumptive pronoun]))] reanalysis

I propose to divide up the V2 properties in essentially two components: a syntactic part and an optional prosodic part. The syntactic part consists itself in two components, namely a requirement that Tense (pied-piping the finite verb) move into the C-domain and a constraint that limits the number of constituents that can be

remerged in the C-domain to one (without requiring that at least one constituent be remerged in the C-domain). These conditions are summarized in (27).

(27) **Compositional approach to V2:**
  a. Tense moves to Fin° for licensing reasons.
  b. The syntactic part of the V2 constraint is compatible with V1, V2 and V>2 orders.
  c. Strict linear V2 is enforced by the presence of a prosodic condition.

The basic idea is that Tense must enter in an Agree relation with Fin° to be assigned values for its two arguments, the utterance situation and the reference situation. This follows from a situation-based approach to Tense which assumes that Tense does not simply relate points in time or intervals, but expresses a relation between two situations (cf. Hinterhölzl 2024). This Agree relation can be expressed via head movement of T to Fin. Furthermore, I propose that this operation is universal, with V2 (meaning the finite verb appearing in the C-domain) resulting from the spell-out of the finite verb (or of the finite auxiliary) in the higher position.

Secondly, I will argue that the bottleneck effect (cf. Haegeman 1996; Roberts 2004) is real, by providing independent evidence for it in the next subsection. Furthermore, I argue that it is not a quirky property of V2-languges but can be reduced to the phase condition, assuming that (minimally) FinP counts as the phase-edge of the T-domain, thereby restricting movement from TP/IP to the C-domain to maximally one constituent. What motivates then the prosodic condition in (27c)? Note that the process of prosodically integrating clause external base-generated material (the reason for the reanalysis of higher topics in German described above) is still ongoing, as is illustrated in (28). The adverbial in (28) can be analyzed as modifying a component of the speech act of assertion and would thus be analyzed (in the standard analysis of modification) as being left-adjoined to ForceP in the structure in (19).

(28) a. *Ehrlich gesagt, ich bin enttäuscht von dir.*
  sincerely say.PTCP I am disappoint.PTCP By you.DAT
  'Honestly speaking, I am disappointed of you.'

  b. *Ehrlich gesagt bin ich enttäuscht von dir.*
  sincerely say.PTCP am I disappoint.PTCP By you.DAT
  'Honestly speaking, I am disappointed of you.'

Note now that the extension of V2 in (28b) cannot be explained with a Holmberg-type of account in terms of the bottleneck, but requires the presence of a prosodic condition, which forces raising of the finite verb from Fin° to Force°. Thus, I propose that the prosodic part of the complex condition can be defined as given in

(29). In the following two sections, we will discuss the evidence for the existence of the bottleneck effect and describe the differences between low V2 and high V2.

(29) Prosodic Edge Condition (PEC): The finite verb must occupy a left-peripheral position in its prosodic phrase in the phase edge.

2.3 Effects of the Bottleneck or What Is a Low V2 Language?

In this section, I will briefly discuss the distribution of subjects in Cimbrian to show that in a low V2 language, subject licensing interferes with wh-movement. This, I will argue, is a core property of a low V2 language, indicating that the bottleneck-effect should be located in FinP. We will see that French and Italian also behave like low V2 languages with respect to this effect. This type of bottleneck-effect does not appear in most Germanic languages. I will argue that the difference can be explained by assuming that in low V2 languages, FinP functions as the phase edge, while in standard German and Dutch, the phase edge is extended to ForceP, which is made visible by head movement of the finite verb to Force°, indicating a high V2 language.

Cimbrian is a German dialect spoken in the village of Luserna, Trentino. Field work was carried out by Federica Cognola, and the data were published in Cognola and Hinterhölzl (2020). Interested readers are referred to this article for a more complete picture of the complex interaction between V2, question formation, and the licensing of subjects in this variety. As is illustrated in (30), there is a complementary distribution between preverbal subjects and the presence of a subject pronoun, or *da* 'here, there', cliticized on to the verb. In (30), *da* is spelled out as *-ta* when cliticized on the verb. The subject in (30f) is unmarked with respect to its information structural role (i.e., it can be new or given information).

(30) a. *Bas* ***hatt-ar***$_j$ *herta gekhoaft dar Luca*$_j$*?*
what has-he always bought the Luca

b. *Bas* ***hat-ta*** *herta gekhoaft dar Luca?*
what has-there always bought the Luca

c. **Bas* ***hat*** *herta gekhoaft dar Luca?*
what has always bought the Luca
'What has always Luca bought?'

d. **Dar Luca* ***hatt-ar***$_j$ *herta gekhoaft in libar.*
the Luca has-he always bought a book

e. **Dar Luca* ***hat-ta*** *herta gekhoaft in libar.*
the Luca has-there always bought a book

f. *Dar Luca* ***hat*** *herta gekhoaft in libar.*
the Luca has always bought a book
'Luca has always bought a book.'

The effect in (30) is a consequence of the subject moving to FinP for anchoring to the context. Normally, a subject in [Spec,FinP] that arguably counts as an A-position, should not interfere with A'-movement of a wh-phrase. However, the effect is explainable if [Spec,FinP] counts as the phase edge of the C-domain. The solution to allowing for wh-movement into the C-domain, taken in low V2 languages, is that the phase edge is evacuated in the following way: the subject remains in a lower position, and a correlate of the subject – a clitic or an adnominal *da* 'here' – undergoes head movement with the finite verb to Fin°, leaving the escape hedge empty for the wh-element. In particular, I propose that definite DPs, in contradistinction to indefinite DPs, have an extra layer with an additional functional head that licenses a correlate DP in its specifier, as in (31). In other words, a referential subject can remain in a lower position only if its correlate, *da* or a clitic pronoun (cl), establishes an Agree relation with Fin°.

(31) $[_{DP}\,[_{DP}$ da/cl] [$D^{\circ}\,[_{NP}$ N]]]

This strategy is arguably also taken in French and Italian questions. As is illustrated in (32) and (33), only a clitic pronoun can directly follow the finite verb; a full DP in this position, as is typical for Germanic languages, is excluded. In the following section, I will argue that the difference between German on the one hand and French, Italian, and Cimbrian on the other hand is that German uses another strategy of avoiding a conflict between subject licensing and wh-movement: the phase edge is extended to ForceP, indicated by the movement of the finite verb to Force°. In other words, the subject in (35) occupies [Spec,FinP], a position which is not available for a full DP subject in wh-questions in low V2 languages like Cimbrian, French, and Italian.

(32) a. *Qu' a-t-il vu?* (French)
what has-t-he seen
'What did he see?'

b. **Qu' a Jean vu?*
what has Jean seen
'What did Jean see?'

(33) a. **Che cosa ha Gianni comprato?* (Italian)
what thing has Gianni bought

b. **Che cosa Gianni ha comprato?*
what thing Gianni has bouhgt

c. *Che cosa ha comprato Gianni?*
what thing has bought Gianni
'What did Gianni buy?'

(34) a. *Bas hatt-ar gekhoaft dar Luca?* (Cimbrian)
what has-he bought the Luca
'What did Luca buy?'

b. **Bas hat dar Luca gekhoaft?*
what has the Luca bought

(35) *Was hat (der) Lucas gekauft?* (German)
what has (the) Lucas bought
'What did Lucas buy?'

To sum up, following Rizzi (1982) – who made the argument for Italian – I propose that Italian, French, and Cimbrian instantiate V-to-C movement in questions, but the position that the verb moves to is low, namely Fin°. The subject remains in a lower position to permit wh-movement of another constituent to FocusP and ForceP to check the focus and the interrogative force feature of wh-elements.

In the following section, we will turn to the V2-system in the West Germanic languages. These have generalized V2 also to declarative clauses. While wh-movement of objects and object topicalization will require extending the phase edge to ForceP, resulting in verb movement into the highest head in the C-domain, this type of verb movement is arguably also present with wh-movement of subjects and with subject topicalization as a consequence of the prosodic condition introduced in (29) above.

2.4 Low and High V2 in West Germanic

While the V1-pattern in declarative clauses disappeared – apart from special usages in particular genres like jokes – in modern Germanic, there are modern Germanic varieties that still exhibit V3-orders in declarative main clauses, most notably in West Flemish, as we have already seen in Section 1.1 above.

As noted in Haegeman and Greco (2017), temporal adverbials in West Flemish, in difference to Standard Dutch, give rise to a V2 or a V3 pattern, with the crucial differ-

ence that the V3 pattern does not allow for a reconstructed reading, implying that the adverbials in the V3 pattern are to be analyzed as base-generated (high) topics, also called frame adverbials. Another example of this is given in (36).

(36) a. *Oan-k toekwamen, vielt den eletriek ut.*
when-I arrived fell the electricity out

b. *Oan-k toekwamen, den eletriek vielt ut.*
when-I arrived the electricity fell out
'When I arrived, there was a power failure.'

In Dutch, a similar structure gives rise to a subject/nonsubject asymmetry, as is illustrated in (37). In Section 1.1 above, we have already seen the different behavior of clause-initial weak subjects and weak objects in West Germanic. This distinction reappears in this context in Dutch and German, as it becomes evident in (37) and (39). We will come back to the important distinction between weak subjects and weak objects in the following section.

(37) a. *Als er morgen een probleem is, mij moet je niet bellen.*
if there tomorrow a problem is me must you not call
'If there is a problem tomorrow, don't call me!'

b. **Als er morgen een probleem is, je moet mij niet bellen.*
if there tomorrow a problem is you must me not call
'If there is a problem tomorrow, you don't have to call me!'

However, no such contrast appears with truly clause-external adjuncts, that is, ones that modify the entire speech act, which can arguably be analyzed as being adjoined to ForceP, as in (38). Here, a weak, unstressed subject pronoun does not give rise to a marked status of the sentence.

(38) a. [$_{I}$ *Als je honger hebt,*] [$_{I}$ *er ligt brood in de kast*].
if you hunger have there lies bread in the cupboard
'If you're hungry, there's some bread in the cupboard.'

b. [$_{I}$ *Als je geinteresseerd bent,*] [$_{I}$ *ik kan morgen tickets krijgen voor Morricone*].
if you interested are I can tomorrow tickets obtain for Morricone
'If you're interested, I can get tickets for Morricone tomorrow.'

German shows the same distinction as Dutch does, as is illustrated in (39). Again, as the contrast between (39c) and (39d) shows, the restriction does not apply to subjects in general but only to weak, unstressed subjects.

(39) a. *Wenn es morgen ein Problem gibt, wen soll ich kontaktieren?*
if it tomorrow a problem exists whom should I contact
'If there is a problem tomorrow, who can I contact?'

b. *Wenn es morgen ein Problem gibt, MICH brauchst du nicht anzurufen.*
if it tomorrow a problem exists ME need you not call.up
'If there is a problem tomorrow, do not call me!'

c. **Wenn es morgen ein Problem gibt, ich ruf dich an.*
if it tomorrow a problem exists I call you up
'If there is a problem tomorrow, I will call you.'

d. *Wenn es morgen ein Problem gibt, PETER kann dir helfen.*
if it tomorrow a problem exists PETER.NOM can you.DAT help
'If there is a problem tomorrow, Peter can help you.'

Haegeman and Greco (2017) assume that all frame adverbials are base-generated outside of the clause and propose that there is a linking problem in (36b), where, as they propose, the verb remains in a lower position; hence, only the high reading of the adverbial is available (for a revised analysis, see Greco and Haegeman 2023).

I would like to propose that frame-adverbials can attach both clause-internally and externally, but that the minimal structure is preferred for reasons of economy. Note that various authors, who point out the occurrence of V3-structures in Older German (cf. Speyer 2008 for NHG and Petrova 2012 for Middle Low German), propose the structure in (40). Note, in particular, that they locate frame adverbials in the zone where base-generated topics are arguably licensed, and that this structure is almost identical to the structure of the LP periphery proposed by Rizzi (1997) for Italian.

(40) [ForceP [FrameP [FocP [TopP [FinP [VP/IP …]]]]]]
(Speyer 2008)

Furthermore, V3-structures appear in Kiez-Deutsch, as is illustrated in (41). There is an extensive literature (cf. Wiese 2009; Sluckin 2023) on this interesting pattern that I cannot do justice here in this paper. For our purposes, the pattern in (41) raises

the question how this variety differs from modern standard German. This is a tricky issue, since speakers of Kiez-Deutsch do not make V2-"errors" with wh-movement or fronting of objects. Thus, they seem to have the German V2-system in place. I will thus argue below that their V2-system is akin to the standard German V2-system but that they fail to apply the prosodic condition in (29) above. Viewed in this way, V3-orders are direct indicators of a low V2-system in declarative clauses.

(41) *Heute ich geh Aldi.*
today I go Aldi (a type of supermarket)
'Today I will go to Aldi.'

In particular, I propose the following analysis for the contrast between a V2-structure and a V3-structure: If the verb raises to Force°, a V2 structure will result, and if the verb remains in Fin°, a V3 structure will result. This is illustrated in (42). Movement of the finite verb to Force° must then be taken to be triggered by weak subjects in Modern German and Modern Dutch, but is unnecessary in West Flemish, Kiez-Deutsch, and in various historical stages of German.

(42) a. [$_{\text{ForceP}}$ *Wenn es ein Problem gibt, ruf* [$_{\text{FinP}}$ *ich* [$_{\text{TP}}$ *dich an*]]].
b. [$_{\text{ForceP}}$ *Wenn es ein Problem gibt,* [$_{\text{FinP}}$ *ich ruf* [$_{\text{TP}}$ *dich an*]]].

Note that (43a) below violates the prosodic condition introduced above and repeated for convenience in (44): since arguments form a joint phonological phrase with the verb, the verb does not occupy a left-peripheral position in the phonological phrase containing it when FinP counts as the phase edge of the clause. What is the solution? The verb is raised to ForceP, and the phase edge is extended to this phrase. Since adjuncts and topics, familiar, shifting and contrastive Topics alike, are mapped onto a separate phonological phrase, no violation of the prosodic edge condition occurs in this position. This also holds for weak, unstressed subjects: by moving on into the C-domain, they take on the role of either a familiar, contrastive, or continuing aboutness topic and are thus phrased in a separate phonological phrase.

(43) a. [$_{\text{ForceP}}$ (Frame) [$_{\text{FinP}}$ ((Subj) Vfin) .....]]
b. [$_{\text{ForceP}}$ (Frame) (Vfin [$_{\text{FinP}}$ Subj) t]

(44) **Prosodic edge condition**:
V_{fin} must occupy a left-peripheral position in its prosodic phrase in the phase edge

In Section 3, we will come back to the different behavior of weak subjects and weak objects in German and Dutch. In the following subsection, we will summarize the

above empirical observations and discuss their implications for determining IS-defined functional positions in the C-domain in German and Dutch.

2.5 What is special about the German (and Dutch) C-Domain?

If we compare the above observations about the positioning of the finite verb in Romance and in Germanic, then we can conclude that, while in Romance IS-defined positions precede the finite verb (in interrogative and declarative clauses), in Germanic all IS-defined positions must be taken to follow the finite verb. As is illustrated in (45), the finite verb in Italian maximally occupies Fin° (in questions) or a lower position (in declaratives), while the finite verb in German (and Dutch) arguably occupies Force° both in interrogative and declarative clauses.

(45) $[_{\text{edge of C}}$ Force Topic* Focus Topic* $[_{\text{edge of T}}$ Fin [TP ....]]]
finite verb in Germanic (Dutch, German) finite verb in Romance (Italian)

This implies that functional positions for IS-categories in German are to be identified with what is traditionally called the higher middle field. That discourse-given elements in German typically move into the higher middle field is uncontroversial and has been discussed in the literature under the term of scrambling: where scrambling in German and Dutch may both target unstressed but also stressed elements. Unstressed scrambled elements in German can be identified with familiar topics, as described in Frascarelli and Hinterhölzl (2007), while stressed scrambled elements can be identified with either (contrastive) focus phrases or contrastive topics. There is an abundance of literature on this issue, which I cannot address in this paper. The interested reader is referred to Grewendorf and Sternefeld (1990) and to Corver and van Riemsdijk (1994) for an overview of the vast literature on this topic. I will come back to the well-known optionality issue in cases of dislocation of contrastive topics and contrastive focus elements in the following section.

Moreover, Frey (2004) convincingly argues that "in the higher middle field, above sentential adverbs, there is a specialized position for aboutness topics". We can now assume that German is special in having an extended T-domain (that is not known from other languages) or assume that German is not special at all and identify these IS-defined positions with Rizzi's positions in the C-domain. Given Frey's observation about the relative position of topics and sentential adverbs, and given that sentential adverbs are to be taken to modify the proposition, the null hypothesis seems to be that these positions are, in fact, in the C-domain: if we identify the (expression of the) proposition with TP and the embedding of the proposition in the context with the C-domain, we arrive at a rather coherent picture where sentential adverbs mark the edge of the T-domain. In the following section, I will provide some evi-

dence for this account and argue for an analogy between the German C-domain and the one in Romance.

3 Multifunctionality, Optionality and Triggered Derivations

In this section, I will address some consequences and implications of adopting the cartographic approach to the C-domain in Germanic, focusing on phenomena in German. In particular, we discuss the question of whether multifunctional positions should or must be assumed, address the problem of optionality of movement operations that target presumed IS-defined functional heads in the left periphery, and discuss the relation between cartography and narrow syntax.

3.1 IS-Categories and the Initial Position in German

If we accept the above conclusion that IS-defined positions follow the finite verb in the C-domain in German, then the question arises of how the (multifunctional) initial position, that is [Spec,ForceP], is to be characterized.

There are basically two options that can be considered within the general framework of cartography. A) The initial position is a generalized linking position, and it is the choice of the speaker whether he/she wants to continue with the established Aboutness topic, shift to another topic, express a contrastive judgement about already given discourse referents (contrastive topic), or highlight an aspect of a proposition under discussion (contrastive or mirative focus) by moving the relevant IS-defined category into the position before the finite verb. In this approach, the initial position would be grammatically underspecified but pragmatically restricted, since not all linking options would be appropriate in every context. B) The initial position is prosodically defined. This option can be spelled out with a requirement that is parallel to the prosodic condition on the verb in FinP in (44) above, as specified in (46).

(46) In a declarative clause the phonological phrase containing the finite verb cannot occupy the left edge of the intonation phrase.

Thus, the finite verb has to be proceeded by (at least) one phonological phrase. This prosodic requirement can then be taken to be fulfilled by moving the highest element in the C-domain into [Spec, ForceP]. Note that it is compatible with minimalism and phase theory to assume that at the phase edge (which serves to connect the derivation with LF and PF), semantic-pragmatic features and conditions on the one hand, and prosodic and intonational features and conditions on the other hand, come into play. In this paper, I will not pursue the choice between these

options any further, but will simply discuss how, under the assumption of option B), a relatively simple solution to the above-discussed distinction between weak subject and object pronouns becomes available.

As is re-illustrated in (47), unstressed object pronouns differently from unstressed subject pronouns cannot occupy the clause-initial position but need to be stressed and constitute either a focused constituent, as in (47d), indicated by a falling tone, or a contrastive or shifting aboutness topic, as in (47e), indicated by a rising tone, but cannot constitute an unstressed familiar topic, as in (47c) (cf. Frascarelli and Hinterhölzl 2007 for the notions and intonational properties of diverse topic types).

(47) a. *Er hat gestern die Maria besucht.*
he has yesterday the.ACC Maria visited

b. *Es regnete gestern den ganzen Tag.*
it rained yesterday the whole day
'It rained all day long yesterday.'

c. **Sie hat der Hans gestern besucht.*
her has the.NOM Hans yesterday visited

d. *Sie* (H*+L) *hat der Nachbar gestern besucht.*
her has the.NOM neighbor yesterday visited
'As for her, the neighbor has visited her yesterday.'(topic)

e. *Sie* (L+H*) *hat der Nachbar gestern besucht.*
her has the.NOM neighbor yesterday visited
'The neighbor has visited HER yesterday.' (focus)

We noted in Section 2.1 above that subjects move into FinP to be referentially anchored. In general, I assume that contextual values – those pertaining to participate in the utterance situation (speaker and hearer) and those pertaining to discourse referents in the common ground – become accessible in FinP. All referential expressions, subjects and objects alike, will thus enter into an Agree relation with Fin° (for being assigned a referential value from the context), but only the subject moves to [Spec,FinP], given that it normally constitutes the highest argument. Exceptions exist if either the subject is not the highest argument (for example, with certain psych-verbs) or if the subject is indefinite and/or focused (we will come back to the latter case below).

Given that, with option B), we assume that the V2 property in the highest head in the C-domain is fulfilled by attracting the closest constituent to [Spec,ForceP], the speaker – if he/she wants to utter a sentence with a familiar topic – can use

the subject as a clause-initial constituent but not the object. To take precedence over the subject, the object must move to a higher position in the C-domain and take on a particular discourse role, either as a focus or as a special topic (a shifting aboutness topic or a contrastive topic) indicated by a special accent. The unstressed subject, on the other hand, in the absence of an object with a special IS-role, can be moved from [Spec,FinP] without ado to [Spec,ForceP], but will be phrased, due to the prosodic condition outlined above, as a separate phonological phrase.

Sticking to the assumption that referential subjects are licensed in [Spec, FinP] – the asymmetry between unstressed subject and unstressed object pronouns provides an additional argument for our assumption that functional heads dedicated to various IS-categories are contained in the C-domain in German. Moreover, we can dismiss the argument of Szendrői (this chapter) that the initial position being occupied by various IS-categories indicates that no separate positions for focus and (different topics) are needed. To conclude this section, let us discuss an exception to the empirical observation that unstressed object pronouns cannot occupy the initial position in German. An example that has been discussed in the literature on German is given in (48) below.

(48) *Ihr Geld ist nicht weg. Es hat jetzt nur jemand anderer.*
your money is not gone it has now only someone Else
'Your money is not (really) gone, but held by somebody else now.'

(48) sounds pretty good to me. But the crucial point is that the subject is not a referential expression: since the subject is indefinite, the clause is anchored to the context via the given object; hence, the object can take precedence over the subject in moving into FinP. Thus, it is the first candidate to be moved into the initial position in [Spec,ForceP].

3.2 IS-Categories and Optionality

Rizzi's proposal is couched in a framework that has become known as the cartographic approach to syntax, pioneered in Cinque (1999). Szendrői (cf. Section 1.3) points to a potential problem of this approach, noting that certain IS-categories like contrastive topics and contrastive focus elements can appear in various positions in the clause. In particular, she shows that contrastive topics and contrastive foci can appear in clause-initial position, in a VP-adjoined position (left to the lexical verb) and in the in-situ position (right to the lexical verb). Given that the cartographic approach relies on a one-to-one mapping between position and meaning, these data pose a severe problem for this approach.

These observations are not particular for Germanic languages but hold for several IS-categories in many languages. For instance, even in Italian, which makes

a clear distinction between new information focus (typically realized in situ) and contrastive focus (realized in the left periphery), as is illustrated in (49), allows for contrastively focused elements to occur also in-situ, as is illustrated in (50). In the following examples and below, focused syllables are indicated by capital letters.

(49) Context: *Chi ha chiamato?*
who has called
'Who did call?'

a. *Ha chiamato MarIa.*
has called Maria
'Mary called.'

b. % *MarIa ha chiamato.*
'Mary called.'

Context: *Gianni ha chiamato un ora fa.*
Gianni has called an hour ago
'Gianni has called an hour ago.'

c. *No, MarIa ha chiamato* (*non Gianni*).
no Maria has called not Gianni
'No, it was Maria who called (not Gianni).'

(50) Context: *Lui ha invitato Marina.*
he has invited Marina
'He has invited Marina.'
Lui ha invitato MarIa (*non Marina*)*!*
he has invited Maria not Marina
'He has invited Maria (not Marina)!'

The same observations hold for the dislocation of discourse-given elements (so-called familiar topics) in German. As is illustrated in (51a), discourse-given elements typically move to a higher position in the clause. Note that the basic word order between direct objects (DO) and indirect objects (IO) in German is IO > DO. The discussion of the facts in (51) is dedicated to Jürgen Lenerz, who, to my knowledge, was the first in Germany to argue that information structure is part of syntax.

(51) Context: *Wem hat Hans das Geld gegeben?*
whom has Hans the money given
'Who did Hans give the money to?'

a. *Er hat das Geld dem KassIERer gegeben.*
he has the money to.the cashier given
'He gave the money to the cashier.'

b. *Er hat dem KassIERer das Geld gegeben.*
he has the cashier the money given
'He gave the money to the cashier.'

c. *Er hat das Geld wahrscheinlich dem KassIERer gegeben.*
he has the money probably to.the cashier given
'He probably gave the money to the cashier.'

In a cartographic spirit, we can pose a functional head F with the feature: familiar (FamP) in the C-domain, given that unstressed DPs typically move across sentential adverbs, as is illustrated in (51c). We can then analyze (51a) as having moved the discourse-given DP into [Spec, FamP]. But, as is shown in (51b), movement of the given constituent is not obligatory. It seems sufficient for the interpretation at the interface that the given constituent is deaccented in situ. In other words, we may conclude that dislocation of given elements is optional, and what defines a familiar DP is not so much its syntactic position but the prosodic property of being deaccented. This is basically the line of argumentation that Szendrői is following. By the way, it is a rather widespread, common position.

The problem is due to the way the cartographic approach was developed. It started out with the seminal work of Cinque on the fine-grained structure of the I/T-domain, in which he showed that the attachment sites of adverbs (and of adverbials) to the clausal spine are correlated in a systematic manner with specific semantic properties. This approach was then extended in the same spirit to the fine structure of the C-domain by Rizzi (1997). As such, the cartographic approach introduced an element of functionalism into a formal framework of syntax: positions can be correlated with specific semanto-pragmatic functions. However, as Szendrői correctly points out, IS-categories are indicated rather by prosodic and intonational properties than by syntactic positions (at least in the European intonational languages). So why do we then locate IS-categories in the C-domain?

I will answer this question in an exemplary fashion with the case of assuming a formal Focus feature in the C-domain, since it is the IS-category whose relevance in the German C-domain is most disputed (cf. also the position of de Vries and Zwart (this chapter) on this). In particular, one may wonder what the relation is between wh-elements and focus. Focus is generally taken to indicate (new) relevant information, while wh-elements, if anything, indicate the lack of information. This is the functional side. But there is a formal semantic underpinning that connects information questions and focus: namely, the presence of (focus) alternatives.

Asking an information question presupposes the presence of alternatives, i.e., an open proposition. Formally speaking, a Force-head with the feature [+Q] licenses a Focus head, and if licensing relations are local and constrained by phases, then a functional head dedicated to focus alternatives should be in the same phase as the Force-head, namely in the C-domain. However, this does not imply that the syntactic element that instantiates or indicates a focus alternative needs to occupy the C-domain as well; it only has to enter into an Agree-relation with the Focus head in the C-domain. But since its discourse function is most directly indicated by prosodic/intonational properties, it can be spelled-out according to the prosodic requirements of the language.

A solution along this line was already given in Hinterhölzl (2006) for the case illustrated in (51), that is, for the dislocation of discourse-given elements in German. The solution is the assumption of a dedicated discourse head in the C-domain and the assumption of an Agree relation between this IS-head and the discourse-given constituent instigating movement/remerge in its Specifier also in (51b), so syntax is deterministic, but what is optional or rather subject to prosodic conditions is the spell-out of the remerged category: ex-situ or in-situ.

In fact, (51a), with the high spell-out of the DO, constitutes the preferred option. (51b) is a more marked option, but absolutely grammatical. In this approach, we can also account for the difference in preference between the two options: (51a) only involves movement of the DO, which brings the IO in the default position for being assigned sentence accent, the nuclear stress in Chomsky (1971) . Spell-out of the lower copy in (51b), in the present account, results as less economic: it involves the same movement of the DO, but in addition, it requires a stress shift from DO to IO, to mark the IO's information focus with the nuclear accent. This is an option in the stress system of German: like in English, as is illustrated in (52), nuclear stress can be shifted to the left, permitting for the de-accentuation of the DO in-situ. Stress shift is not available in Italian, which explains the contrast between (49a) and (49b). Note, moreover, that if we assume that the dislocation of discourse-given elements, namely the syntactic operation, is indeed optional, then the derivation of both options should be equally economic: (49a) would involve remerge of the DO, while (34b) would only involve stress shift. But the two options clearly differ in their markedness.

(52) *Who has called?*
JOHN has called.

(51b) is only slightly marked, since the de-accented DO can form a prosodic constituent with the main verb, leading to a branching phonological phrase. There seems to be a prosodic condition at play that requires the last phonological phrase in the sentence to be either accented or branching. Note that if the sentence bracket

is lifted, as in (53a–b), the spell-out of the lower copy is much more marked and becomes ungrammatical if an additional violation of Behaghel's law of the growing members is incurred, as is illustrated in (53c–d).

(53) Context: *Wem gab Hans das Geld?*
whom gave Hans the money
'Who did Hans give the money to?'

a. *Er gab das Geld dem KassIERer.*
he gave the money to.the cashier
'He gave the money to the cashier.'

b. ??*Er gab dem KassIERer das Geld.*
he gave the cashier the money
'He gave the money to the cashier.'

c. *Er gab das Geld dem Kassierer der EINzelhandelsgesellschaft.*
he gave the money to.the cashier of.the single-trade-company
'He gave the money to the cashier of the single trade company.'

d. ?**Er gab dem Kassierer der EINzelhandelsgesellschaft das Geld.*
he gave to.the cashier of.the single-trade-company the money
'He gave the money to the cashier of the single trade company.'

The present account also has advantages when it comes to explaining the incipit of V2 in Germanic. Note first that all languages in the present account are V2-languages in the sense that they involve T-to-Fin movement that typically pied-pipes the lexical verb. Most languages happen to involve a low spell-out of the finite verb, possibly for economy reasons: the lexical verb is arguably interpreted down stairs at LF, and a low spell-out of the finite verb allows for an identification of its PF- and LF-position.

Most prominently, Wackernagel (1892) has argued that V2 was motivated initially by prosodic reasons (cf. also Anderson 1993 for a revival and reappraisal of this position). It is well-known that Older Germanic disposed of question particles (cf. Eythorsson 1995 for V2 and question particles in Gothic). It is thus plausible that V2 came about via a high spell-out of the finite verb as a simple and economic way to provide a phonological host for these particles that arguably underwent a weakening process. When these particles were lost, the high spell-out of the finite verb in ForceP was then presumably reanalyzed as positionally signaling a syntactic feature of illocutionary force (it can be assumed that interrogative mood and imperative mood are marked positionally via the finite verb in German).

Finally, let us take stock of the differences between new information focus and other types of focus, like contrastive or mirative focus. While new information focus is tied to a specific position (in which the nuclear accent is assigned), other types of focus can be realized on any type of category in various positions in the clause, as is illustrated by the contrast between (54) and (55).

(54) Context: *Was hast du dem Kassierer gegeben?*
what have you to.the cashier given
'What did you give to the cashier?'

a. *Ich habe dem Kassierer das GEld gegeben.*
I have to.the cashier the money given
'I gave the cashier the money.'

b. **Ich habe das GEld dem Kassierer gegeben.*
I have the money to.the cashier given
'I gave the cashier the money.'

(55) Context: *Hans hat dem Kassierer die Rechnung gegeben.*
Hans has to.the cashier the bill given
'Hans gave the bill to the cashier.'

a. *Nein, Hans hat dem Kassierer das GEld gegeben.*
no Hans has to.the cashier the money given
'No, Hans gave the cashier the money.'

b. *Nein, Hans hat das GEld dem Kassierer gegeben.*

c. *Nein, das GEld hat Hans dem Kassierer gegeben.*

I will now argue that the contrast between (54) and (55) speaks for a solution in which new information focus does not require the assumption of a dedicated syntactic head, while contrastive focus does. Arguably the most minimal account for making visible new information focus at the interface is a simple mapping condition that requires that new information be aligned with the nuclear accent. In essence, new information focus can only be licensed in the base position in German. Thus, assuming a special syntactic position in the clause for information focus would be non-minimal.

On the other hand, contrastive focus can be licensed in a derived position, for which movement to a dedicated position has to be assumed. Furthermore, we have seen above that any constituent (in addition to sub-word constituents like

unstressed syllables) can be marked for contrastive focus. Within cartography, we can propose a high functional head that is defined by a formal feature (contrastive focus) and a specific accent, an auto-segmental morpheme.

In the following section, we will argue that such a dedicated head needs to be assumed within the current framework of minimalism to avoid untriggered movement. This auto-segmental tonal morpheme can then be taken to align with any constituent agreeing with the formal feature of this head. The positions of the contrastively focused constituent in (55a, b, c) can be identified with its base position, its LF-position, and a prosodically motivated initial position, respectively. This procedure thus constitutes a simple and flexible mechanism for marking contrastive focus of any argument or adjunct in the clause.

This is the approach taken in Frascarelli and Hinterhölzl (2007), who identify different topics via functional positions in the C-domain that are characterized by pragmatically motivated formal features and specific auto-segmental intonational morphemes. In the following section, we will further strengthen the present proposal, arguing that the assumption of functional positions for IS-categories is called for in minimalism.

3.3 IS-Categories and Triggered Derivations

In this section, we will look at the implications of the cartographic approach for general assumptions in the minimalist program. Note, in particular, that the minimalist assumption that there is no free movement of α in the grammar has major implications also for the representation of IS-categories in the grammar. The assumption that movement is triggered and involves a feature-checking operation with a higher head implies the necessity to assume functional heads dedicated to grammatically relevant pragmatic and information-structural categories. In other words, if we observe, for instance, for German, that contrastive focus can be licensed in-situ as well as in a derived position, we have to posit a functional head to which the relevant constituent is moved; otherwise, movement of this constituent would result as not being motivated in the grammar.

In the present framework, this means that the relevant constituent is endowed with a non-interpretable feature [contrastive focus] and enters into an Agree relation with a higher functional head with an interpretable feature [contrastive focus], whereby it is aligned with the intonational contour assigned to this functional head, while a constituent that is to obtain the interpretation of new information focus can then be simply represented with assuming an interpretable feature [new information focus] in the derivation. This feature will remain visible at the interfaces and, in particular, will trigger, in the mapping operation to PF, an alignment with the nuclear stress.

The posited dedicated functional head does not directly posit a challenge to assumptions within narrow syntax, since it can be motivated with the presence of an intonational auto-segmental morpheme. More problematic is the assignment of the non-interpretable discourse feature to the relevant constituent, since, according to assumptions in narrow syntax, the derivation should be geared by lexical features only. Note, however, that this is an unnecessary stipulation within minimalism, which, in addition, would leave many movement operations as unmotivated. Note, in particular, that these discourse features on syntactic constituents serve to represent the communicative intentions of the speaker and thus must be taken to be part of the LF system. Moreover, since IS-categories are connected with effects at the PF-interface, they need to be represented syntactically if we assume, with Chomsky (1957), since the beginning of the generative enterprise, that syntax serves to connect meaning and form.

Extending narrow syntax minimally, we could assume that in a phase-based derivation, discourse features become imported from the interface or become visible for the derivation in the C-domain, while the derivation in the v-domain is only geared by lexical semantic features. I will leave this issue for further research here. In this approach, the speaker would be taken to draw information from different knowledge sources at different points in the derivation: he/she would draw information from the lexicon to construct the (context-independent) proposition and then would draw information from the context, including the Common Ground, to embed this proposition in the discourse, allowing him/her to indicate his/her discourse moves in a grammatically transparent manner.

These assumptions are not standard within minimalism, which assumes a clear separation between the modules of syntax, semantics, and pragmatics. For instance, within the generative semantic program advocated by Heim and Kratzer (2002), the anchoring of referential expressions is achieved via assignment functions at LF. These functions access indices from discourse referents in the context set and assign them to constituents that match these referents in terms of their ϕ-features. Note, however, that this leads to an expectation that definite and discourse-anaphoric DPs can be licensed in any syntactic position. However, this is not what we observe in German. As has been noted by Kratzer (1989) and Diesing (1992), definite DPs have to move out of the vP, while indefinite DPs can remain in the vP. While Diesing's approach can explain why indefinites can be licensed in the vP, she does not have an explanation for why definites cannot. Assuming that context values become accessible in a specific syntactic position, namely in FinP, provides a motivation for definite DPs to move out of the V-domain to enter in an Agree relation with Fin° (cf. Hinterhölzl 2024 for the details of this approach). In conclusion, we have clear evidence that the grammar reflects pragmatic properties, which therefore need to be represented syntactically. It is this core insight that

defines the cartographic approach in which the discussion of the C-domain in Germanic is couched in this paper. Finally, let me note that assuming that referential subjects are licensed in [Spec, FinP] served as the key argument for the presence of IS-categories in the German C-domain and for the structural parallelism of the C-domain in Germanic and Romance.

4 Some Thoughts on the Right Periphery

Because nominal objects precede the main verb in German and Dutch, these languages are considered OV-languages. Note, however, that a great number of constituent types can follow the verb in its (presumed) base position in these languages. In particular, prepositional objects, modifiers, and all types of embedded sentences, including adjunct clauses, CP-complements, and relative clauses, can occur in the right periphery, traditionally called the *Nachfeld* (henceforth post-verbal field) in German. The problem is that, in the current framework, there are not foreseen any specialized positions for these elements. In the past, most of these elements were analyzed as being right-adjoined to VP or CP, requiring (rightward) A'-movement to these adjoined positions. In such an approach, rightward movement had to be assumed to have different properties from leftward movement, violating, for instance, restrictions on extraction obeyed by leftward movement. Hence, this approach has been completely dismissed in the minimalist framework.

Consequently, proposals have been developed which derive right-dislocation constructions from left-dislocation plus vP-intraposition (see below) in Romance (cf. Frascarelli and Hinterhölzl 2016 for Italian). Lindahl (this chapter) points to an interesting account of right-dislocation in Norwegian by Vangnes (2008), who explains restrictions on right-dislocation via left-dislocation and further movement of remnant elements to the left.

De Vries and Zwart (this chapter) provide a rather descriptive categorization of the postverbal field in German and Dutch and then discuss different options of deriving them without committing themselves to a specific account. Following their description, it becomes apparent that there is no unique account possible for deriving the diverse constituents in the postverbal field in West Germanic. It is also interesting to see that the three categories that they provide are defined more in information-structural and prosodic (intonational) terms than in terms of syntactic properties. More specifically, they distinguish between extraposition, dislocation (also called backgrounding), and afterthought, noting that PPs, CP-complements, and modifiers can be extraposed to the right of the verb, where they are in focus, are part of the overall intonation contour, and may even contain the main accent. Backgrounded dislocated constituents are pronounced with a low, level intonation, often without a preceding pause. Backgrounded constituents typically specify a

pronominal correlate in the core sentence and serve to increase the salience of their correlate. An afterthought, on the other hand, does contain new information and receives an independent intonation contour with its own main accent, preceded by a pause. An example of each category is given in (56).

(56) a. *Sie hat gelogen über ihr Einkommen.* (extraposition)
she has lied about her income
'She has lied about her income.'

b. *Ich habe ihn bereits gesehen, den Film.* (backgrounding)
I have it already seen the film
'I have already seen that film.'

c. *Ich habe was Interessantes gelesen,* (afterthought)
I have something interesting read
ein Buch über den Urknall.
a book about the big.bang
'I have read something interesting, it was a book about the big bang.'

These descriptions refer to the various functions of postverbal elements in West Germanic and are thus reminiscent of the information-structural definitions of the various positions in the left periphery. De Vries and Zwart (this chapter) point out various individual solutions to deriving post-verbal elements in West Germanic. According to them, afterthoughts could be handled as separate utterances that are coordinated with the host clause and can be taken to be subject to various deletion operations familiar from conjunction. Furthermore, they observe that some cases of extraposition (extraposition of PP-arguments and CP-complements) can possibly be handled as being base-generated as right-hand complements of the verb in the right-branching structure in which nominal complements (possibly for Case reasons) move out of the vP. And the cases of backgrounded elements can possibly be handled in terms of (left-ward) adjunction to the clausal spine and free ordering in a system where pair-merge does not impose any order constraint between the host category and adjunct.

De Vries and Zwart (this chapter) also point out that extraposition and backgrounding distinguish themselves in the observance/non-observance of mirror-effects, as is illustrated in (57) for extraposition and in (58) for backgrounding. Extraposed constituents appear in the postverbal field in the mirror order of their correlates in the middle field, while backgrounding dislocation shows anti-mirror effects: in (58), specifying the values for pronominal subject and object requires the original order of these constituents in the postverbal field.

(57) a. *Ich habe jenem Kind ein Buch geschenkt mit vielen Seiten, das*
I have that child a book given with many pages that
gerne liest.
likes.to read
'I have given a book of many pages to a child that likes reading.'

b. **Ich habe jenem Kind ein Buch geschenkt, das gerne liest, mit*
I have that child a book given that likes.to read with
vielen Seiten.
many pages

(58) a. *Er hat sie auf den Mund geküsst, der Peter, die Maria.*
he has her on the mouth kissed the.NOM Peter the.ACC Maria
'He, Peter, kissed her, Mary, on her mouth.'

b. **Er hat sie auf den Mund geküsst, die Maria, der Peter.*
he has her on the mouth kissed the.ACC Maria the.NOM Peter

Note that mirror and anti-mirror effects occur in cases of VP-intraposition. More generally, Cinque 1999 observes the following correlation in order restrictions between pre-head and post-head occurrences of constituents, as is illustrated in (59).

(59) If three elements precede the lexical head H in the order A > B > C > H, they can either follow this head in the mirror order H > C > B > A or in the original order H > A > B > C

For instance, in the OV-language German, manner adverbs, locatives, and temporal adverbs precede the verbal head in the order Temp > Loc > Manner in the unmarked case, while they occur in the mirror order post-verbally in English, while the original order is grammatical as well but rather marked, as is illustrated in (60).

(60) a. *Hans hat gestern den Brief im Park sorgfältig gelesen.*
Hans has yesterday the letter in.the park carefully read

b. *John has read the letter carefully in the park yesterday.*

c. *John has read the letter yesterday in the park carefully.*

These various orders can be derived from an underlying A B C H order, using successive cyclic VP-intraposition that either pied-pipes material to the right or strands this material on its way (cf. Hinterhölzl 2009 for the details). Note, in particular, that

VP-intraposition in English and Italian in the lower domain seems to make use of pied-piping, given the inversion of DO and IO in these VO-languages with respect to the unmarked order IO DO V in German, as is illustrated in (61).

(61) a. *Hans hat der Maria das Buch gegeben.*
Hans has the.DAT Maria the book given

b. *Gianni ha dato il libro a Maria.*
Gianni has given the book to Maria

c. *John gave the book to Mary.*

Note that anti-mirror effects also occur in cases of backgrounding of adjuncts in German. As is illustrated in (62), the original order is preferred over the mirror order, even though the latter is not completely ungrammatical.

(62) a. *Hans hat die Maria besucht gestern in Wien.*
Hans has the Maria visited yesterday in Vienna
'Hans has visited Mary in Vienna yesterday.'

b. ??*Hans hat die Maria besucht in Wien gestern.*
Hans has the Maria visited in Vienna yesterday

A potential explanation for the difference between extraposition and dislocation would be to assume that VP-intraposition also occurs in German and involves the option of pied-piping in the lower domain, but the option of stranding in the higher clausal domain. VP-intraposition in the lower domain, however, must then be taken to be masked by argument movement out of the vP in German and Dutch, and would then only be visible with material that is spelled-out in the lower vP-internal position.

In this scenario, we could surmise that extraposed constituents are subject to backward-deletion (BWD) that is familiar from the derivation of discontinuous DPs, as is illustrated in (65) below. Note first that discontinuous DPs typically occur when a DP – not allowing for subextraction, as illustrated in (64) – contains constituents that differ in their information-structural category (cf. T for Topic and F for Focus in (64)). Following Wilder (1995), Hinterhölzl (2002) proposes that pied-piped material is subject to BWD, as is illustrated in (63) and defined in (63').

(63) a. $[_C$ X Y] ... . $[_C$ ~~X~~ ~~Y~~] standard case: one copy completely deleted
b. $[_C$ X ~~Y~~] ... . $[_C$ ~~X~~ Y] forward deletion of X plus backward deletion of Y

(63') Free Deletion of Pied-piped Material (FDPM)

a. Material that is moved to check a feature is subject to FWD.

b. Material that is pied-piped by such movement is subject to optional BWD.
(cf. Hinterhölzl 2002)

(64) a. **Über Chomsky hat ihm kein Buch gefallen.*
about Chomsky has him no book pleased
'No book about Chomsky pleased him.'

b. [*Bücher über Chomsky*] *haben ihm keine gefallen.*
books about Chomsky have him none pleased
'Books about Chomsky did not please him.'

(65) a. ***Englische Bücher** hat er **keine** gekauft.*
English books has he none bought

b. $[_{CP}{}^{T}$ *hat* $[_{IP}$ *er* $[_{FP}{}^{F}$ $[_{AgrOP}$ $[_{DP}$ $keine_{F}$ $englische_{T}$ $Bücher_{T}]$ *gekauft*]]]]

c. $[_{CP}{}^{T}$ *hat* $[_{IP}$ $[_{FP}{}^{F}[_{DP}$ $keine_{F}$ $englische_{T}$ $Bücher_{T}][_{AgrOP}$ $[_{DP}$ ~~$keine_{F}$~~ $englische_{T}$ $Bücher_{T}]$ *gekauft*]]]]

d. $[_{CP}{}^{T}$ *hat* $[_{IP}$ $[_{FP}{}^{F}[_{DP}$ $keine_{F}$ ~~$englische_{F}$~~ ~~$Bücher_{F}$~~$][_{AgrOP}$ $[_{DP}$ ~~$keine_{F}$~~ $englische_{T}$ $Bücher_{T}]$ *gekauft*]]]]

e. $[_{CP}{}^{T}$ $[_{DP}$ ~~$keine_{F}$~~ $englische_{T}$ $Bücher_{T}]$ *hat* $[_{IP}$ $[_{FP}{}^{F}[_{DP}$ $keine_{F}$ ~~$englische_{F}$~~ ~~$Bücher_{F}$~~$]$ $[_{AgrOP}$ t_{DP}]]]]

Now, if we assume that German has VP-intraposition with the option of pied-piping in the lower clausal domain and the direct object is moved out of the vP for case licensing reasons, pied-piping a relative clause, the spell-out of the object relative in the vP would then lead to the order object relative < subject relative in the post-verbal domain.

Note, however, that this account, other than being overly complex and little motivated by independent facts, fails to explain another important property of extraposition, as is also noted by De Vries and Zwart (this volume). Extraposed elements cannot be topicalized to the exclusion of their host category, as is illustrated in (66).

(66) a. **Getroffen, der krank war, hat Hans gestern einen Mann.*
met that sick was has Hans yesterday a man

b. *Einen Mann getroffen, der krank war, hat Hans erst gestern.*
a man met that sick was has Hans only yesterday
'Hans has met a man that was sick just yesterday.'

Note now that if it is assumed that postverbal relative clauses are derived via BWD, as sketched above, the derivation in (66a) cannot be blocked. What (66a), however, indicates is that extraposition is anti-cyclic and can only apply late in the derivation. One way to account for this property is to follow Truckenbrodt (1995), who convincingly argues that extraposition is a PF-process governed by prosodic restrictions.

If we informally assume a restriction like (67), then the mirror-effect, as well as the property illustrated in (66), can be derived. Linearization after the host DP will then account for the occurrence of relative clauses in the middle field, while linearization after the c-command domain of the host will then account for the order object relative < subject relative in the postverbal field, as the reader may be able to verify for him/herself.

(67) Extraposed constituents can be linearized (directly) after the spell-out of the host or the c-command domain of the host.

Backgrounding dislocation can then be taken to be derived by assuming VP-intraposition in the T-domain that strands discourse-given elements and spells-out the verb in a higher position. The advantage of this account is that VP-intraposition can be taken to be present also in the absence of a postverbal field but would be masked by a) stranding of postverbal material, and b) by spell-out of the verb in the lowest position (cf. Hinterhölzl 2009 for motivating VP-intraposition as a case of A-movement that licenses adjuncts as predicates on the event argument of the VP).

More specifically, in Hinterhölzl (2009), it is argued that there is no head-complement parameter and that directionality only comes into play at PF, in which left- and right-headed prosodic constituents (namely (s w) and (w s) ones) can be distinguished. The different word orders in so-called OV- and VO-languages can be derived from a unique underlying structure via VP-intraposition, where interface conditions determine, in a phase-based manner, the choices between pied-piping and stranding and the spell-out position of the verb. It is well-known that German gradually developed from a mixed OV/VO language to an almost pure OV-language by eliminating postverbal predicates in a first step and then ousting postverbal nominal arguments in a second step (cf. Hinterhölzl 2010). Note that an interface-based account can best explain the gradual nature of changes in unmarked word order from a unique underlying base order.

5 Conclusions

To sum up, we have seen that a detailed comparison of the left periphery of Germanic and Romance reveals that their C-domains are, in fact, very similar, if not identical. Our main point was that these dedicated IS-positions in Germanic are masked by the nature of V2. While there is limited evidence for focus movement in Standard German, we have seen that there is ample evidence that all types of topics, namely aboutness topics, contrastive topics and familiar topics move into derived positions following the finite verb. We have then argued that these movement operations must be taken to be triggered by information-structurally determined features; otherwise, they cannot be motivated in a theory of grammar that does not admit (free) move-α. As far as the postverbal domain is concerned, we have argued that the theory does not foresee an LF-determined right-periphery and that what has been called the right-periphery in German can best be determined by prosodic and intonational properties. It was indicated (though not explicated in detail) that this is expected in an account in which post-verbal constituents in both OV- and VO-languages are derived by VP-intraposition, where the option of pied-piping or stranding of arguments and adjuncts is determined by properties of the PF-interface.

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