V2 as an edge (and not an edges) phenomenon

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1. Introduction

In this paper I revisit the question of the structural position of the sentence-initial XP in Verb Second (V2 for short) clauses. The V2 requirement means that the finite verb of a clause is preceded by exactly one XP as in (1), or more abstractly formulated, that the clauses in question have the structure $XP - V_{fin} - ZP...$

(1) a.	Peter hat dieses Buch gestern gelesen. Peter has this book yesterday read.	(German)
b	Gestern hat Peter dieses Buch gelesen. Yesterday has Peter this book read.	

However, most Germanic V2 languages are characterised by the so-called root-embedded asymmetry, i.e. main clauses are subject to the V2 requirement while in embedded clauses the finite verb usually stays lower down in the structure as is illustrated in (2) vs (1a).

(2) $\dots da\beta Peter dieses Buch gestern gelesen hat.$ (German) \dots that Peter this book yesterday read has

There have been various suggestions as regards the syntactic structure of V2 clauses in German and the other Germanic languages (for some suggestions see section 2). To my knowledge, however, none of the structures proposed has really considered discourse functions (for a first step see Haegeman 1996). To be more precise, Frey (2000) for example, suggested that the V2 requirement could be satisfied in three ways, namely (i) merger of an expletive, (ii) stylistic fronting and (iii) semantically/pragmatically triggered fronting of an XP, so that in (iii) discourse functions do come into play. These discourse functions, however, are simply encoded by different features, such as [fok] or [link], which appear on one and the same head (C°). The aim of this paper here is to incorporate discourse functions into the syntactic structure of V2 clauses.¹

2. Previous accounts

2.1 Asymmetric approaches

In the literature (e.g. Travis 1984, Zwart 1997) we often find that V2 clauses are analysed differently depending on whether they are subject-initial or have another type of XP in the clause-initial position. Thus subject-initial clauses are simply analysed as IPs (or their respective modern equivalents) because the subject occupies the canonical subject position, SpecIP, while in all other clauses (e.g. object-initial or adverb-initial clauses) the sentence-

¹ In this paper I only consider declarative main clauses.

initial element is topicalised which means that the clause is a CP. According to Zwart, this asymmetric approach to V2 is supported by the different agreement patterns in the examples in (3).

(3) a.	Wy speult. we play	(Eastern Dutch, Zwart 1997)
b.	datte wy speult. that we play	
с.	<i>Speule wy?</i> [as well as all o play we	her inversion constructions]

2.2 Symmetric approaches

The proponents of the symmetric approaches (among them den Besten 1983, Holmberg & Platzack 1995, Vikner 1995, Schwartz & Vikner 1996, Roberts & Roussou 1998, Frey 2000, Roberts 2000), on the other hand, advocate the idea that all kinds of sentence-initial XPs of V2 clauses target the specifier of the same phrase, CP in most analyses.² Schwartz & Vikner 1996 argue that a uniform treatment of all V2 clauses is preferable over the asymmetric approach as subject-initial and non-subject-initial clauses pattern exactly alike with respect to a number of phenomena such as placement of adverbials (see (4)) and extraction from embedded V2 clauses.

(4) a.	daß bis gestern kein Mensch dieses Buch gelesen hatte. that till yesterday no human being this book read had " that no-one had read this book till yesterday."	(German)
b.	*Bis gestern kein Mensch hatte dieses Buch gelesen. till yesterday no human being had this book read	
с.	*Bis gestern dieses Buch hatte kein Mensch gelesen. till yesterday this book had no human being read	

In the case of adverb placement, for example, Schwartz & Vikner (1996) argue as follows. (4a) shows that adverbials can adjoin to IP [the argumentation does not suffer if we assume – instead of adjunction to IP – that there is an adverb-related XP in the Split-IP, which is structurally higher than the subject position(s)] and if subject-initial main clauses were really just IPs, adjunction of an adverbial should be possible here as well. This prediction, however, turns out to be wrong (cf. (4b)). Instead, subject-initial main clauses behave exactly like object-initial main clauses (4c) and do not allow for adjunction. This behaviour is predicted if both subject-initial and non-subject-initial main clauses are CPs.³

 $^{^{2}}$ Den Besten (1983) was the first to suggest that V2 clauses are (what is now called) CPs. He argued that the root-embedded asymmetry found in most V2 languages is due to the fact that in declarative main clauses the verb moves to C (his COMP) while in embedded clauses this position is occupied by the complementiser so that the verb has to stay further down in the clause.

Haider (1993) goes even one step further than the other proponents of the symmetric approach and claims that there is no (independent) IP in German as, according to him, there is no compelling evidence to assume this category in German. Therefore V2 is a phenomenon of the combined CP/IP in German.

³ Please note that Schwartz & Vikner (1996) do not consider the possibility that (4b) could simply be ruled out because the V2 requirement (which would then be located in I°) is violated and that in OT terms the V2 constraint is higher ranked than the constraint regulating adjunction.

Schwartz & Vikner (1996), however, have to admit that the symmetric approach cannot provide a satisfactory explanation as regards, e.g., the distribution of weak pronouns in sentence-initial position where subject pronouns are fine but object pronouns are not, as can be seen in (5) and (6). I will return to this problem in section 4.

(5) a.	Das Kind hat das Buch gelesen. the child has the book read	(German)
b.	<i>Es hat das Buch gelesen.</i> it has the book read	
(6) a.	Dieses Buch hat das Kind gelesen. this book has the child read "This book, the child has read."	
b.	*Es hat das Kind gelesen. it has the child read	

In the discussion below, I will follow the symmetric approach and assume that all V2 clauses are CPs but I will argue that we need a finer-grained structure, namely a Split-CP à la Rizzi (1997) to account for all the data. Thus we reach a kind of synthesis of the symmetric and the asymmetric approach. In other words, I will argue that the V2 phenomenon is located in a single "extended edge" (the Split-CP), instead of involving two different edges, IP and CP.

3. A closer look at German data

Contrary to the distinction drawn in the asymmetric approaches (i.e. subject-initial vs. non-subject-initial clauses), the data in (7) show that many more types of XP pattern with subjects.

(7) a.	Alle Studenten lieben Syntax. All students love syntax.
b.	<i>Einer alten Frau wurde die Handtasche gestohlen.</i> [an old woman]-Dat was the handbag stolen roughly: "Someone stole the handbag of an old lady."
c.	Mir war gestern fürchterlich heiß. me-Dat was yesterday terribly hot "I felt terribly hot yesterday."
d.	Morgen kommt der Weihnachtsmann. tomorrow comes the Santa Claus "Santa Claus is coming tomorrow."

In addition to subjects (7a), Dative object DPs in passives (7b), Experiencer DPs of impersonal psych-verbs (7c) and certain temporal and locative adverbs that create a setting⁴ (7d) can occur in sentence-initial position with "neutral stress and interpretation". This means that all of the sentences in (7) can be used as out-of-the-blue utterances or as answers to the

⁴ These adverbs seem to be all the adverbs that fall into Frey & Pittner's (1998) categories of *Bereichsadverbiale* and *Frameadverbiale*.

question 'What happened?'.⁵ Of course, all of these sentence-initial XPs *can* be stressed, focussed or topicalised as well.

Other object DPs, PPs, adverbials and VPs, on the other hand, can only appear in sentence-initial position if they are topicalised, link up with the preceding sentence or receive (contrastive) focus.

(8) a.	Diesen Minister hat die Presse schon lange kritisiert. this-Acc minister has the press already long criticised "The press has criticised this minister for a long time."		
b.	* <i>Einen Minister hat die Presse schon lange kritisiert.</i> a-Acc minister has the press already long criticised		
c.	EINEN Minister hat die Presse schon lange kritisiert (aber nicht alle). a-Acc minister has the press already long criticised (but not all) "The press has criticised one minister for a long time (but not all)."		
d.	Einen MINISTER hat die Presse schon lange kritisiert (aber nicht den Kanzler).		
	a-Acc minister has the press already long criticised (but not the chancellor)		
	"The press has criticised a MINISTER for a long time (but not the chancellor)."		

In (8a) the demonstrative *diesen* ("this-Acc") indicates that the minister we are talking about must have been mentioned in the preceding sentence. Hence the sentence-initial object DP establishes a link between the two sentences. (8b) illustrates that an object that is newly introduced into the discourse (indicated by the indefinite article) and therefore calls for neutral stress and interpretation cannot occur sentence-initially. It can only do so if it (or rather some part of it) receives contrastive focus, as can be seen in (8c) and (8d).

However, as the examples in (9) show, sometimes not even focalisation alone makes an object a licit sentence-initial element. (9a) and (9b) will always be interpreted as *Peter* being the subject and *Maria* the object. To turn *Peter* into the object we have to use the definite article with the name (a construction that is usually only found in dialects of German) to mark the DP morphologically as Accusative.

- (9) a. *Peter liebt Maria*. Peter loves Maria.
 - b. *PETER loves Maria*.
 - c. *Den Peter liebt Maria.* the-Acc Peter loves Maria. "Maria loves Peter."

The same holds for Dative object DPs in active clauses, as is illustrated in (10).

(10) a.	<i>Dem Peter hat Maria ihre Liebe gestanden.</i>
	the-Dat Peter has Maria her love confessed
	"To Peter, Maria confessed her love."

b. *Peter hat Maria ihre Liebe gestanden.* Peter has Maria her love confessed

⁵ Note that (7d) sounds much more natural than the subject-initial version *Der Weihnachtsmann kommt morgen*.

In the version without the article (10b), not even the possessive pronoun which unambiguously refers to *Maria* helps to turn *Peter* into the object. It rather leads to high marginality, if not ungrammaticality.

The fact that PPs, just like adverbials that do not create a setting, have to be focussed or topicalised is illustrated by the following example from the *Stuttgarter Zeitung*, April 4th, 2005 which comments on the Pope John Paul II who had just died. Here, the fronted PP *vom Westen* ("by the West") contrasts with the PP *im Osten* ("in the East") of the first conjunct.

(11) Er hat geholfen, die Regime im Osten zu beseitigen, aber vom Westen He has helped the regimes in-the East to get-rid-of but by-the West ließ er sich nie vereinnahmen.
let he himself never take-in "He helped to get rid of the regimes in the East but he would never let himself be used by the West."

Last but not least, (remnant) VPs in sentence-initial position have to make reference to some aforementioned event, element etc. or be contrastively focussed, as can be seen in (12). Here we might think of a discussion of possible consequences of a political scandal, the resignation of the minister (i.e. the option given by the fronted remnant VP) (not) being one of them.

(12) Zurücktreten wird der Minister deswegen wohl nicht. Resign will the minister because-of-that probably not "The minister probably won't resign because of that."

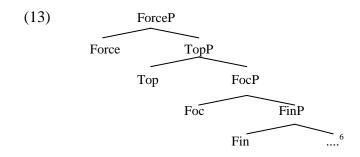
Table 1 summarises which XPs can show up in sentence-initial position with neutral stress and interpretation (but can also have a special discourse function) and which XPs have to always be associated with a special discourse function to be able to occur sentence-initially.

	neutral	special discourse function
subject DPs	\checkmark	✓
Dative objects in passives	\checkmark	✓
Experiencer DPs of	✓	✓
impersonal psych-verbs		
temporal and locative	\checkmark	\checkmark
adverb(ial)s that create a		
setting		
other object DPs	Х	\checkmark
other adverb(ial)s	X	\checkmark
PPs	X	\checkmark
(remnant) VPs	Х	\checkmark

Table 1: sentence-initial XPs and discourse function

4. Discourse functions and Split-CP

In his seminal paper on the fine structure of the left periphery Rizzi (1997) suggested that the CP be split into (at least) the following categories: ForceP – where the clause-type is determined, TopP – targeted by topicalisations, FocP – targeted by focussed elements, and FinP – where finiteness is encoded. This Split-CP has the following structure then.



Assuming that German, too, does not simply have a CP but such a finer-grained structure and that the sentence-initial XPs of V2 clauses target different specifier positions within this Split-CP, the above observations can easily be accounted for. I suggest that all kinds of XPs that can occur in sentence-initial position with neutral stress and interpretation are merged in or move to SpecFinP. All the other kinds of XP, however, have to be associated with a topic or focus feature to be able to occur sentence-initially in a V2 clause. This means that these XPs move to SpecTopP or SpecFocP, respectively and check their semantic feature against the respective head. The same applies to XPs of the "neutral group" if they are contrastively focussed or topicalised.

Whether an XP can end up in SpecFinP or whether it has to have a special discourse function is determined by economy and locality. If the numeration still contains an expletive *es*⁷ or an adverb that creates a setting once the derivation has reached FinP, this element will be merged in SpecFinP because merger is less costly than movement of an XP. That's why (7d) with the adverb *morgen* ("tomorrow") merged in SpecFinP is much more natural than the subject-initial version *Der Weihnachtsmann kommt morgen*., which requires movement of the subject DP. If, however, all material is used up by the time the derivation reaches FinP, the default case is to move the XP closest to Fin° to SpecFinP. This XP is usually the subject or, in the absence of a subject DP, the Experiencer DP of an impersonal psych-verb.^{8,9}

⁷ Expletive *es* can be found in presentational sentences (i) and impersonal passives (ii).

(i)	Es hat soeben der Kanzler die Bühne betreten.	(German)
	Expl has just the chancellor the platform entered	
	"In this moment, the chancellor has mounted the platform."	
(ii)	<i>Es</i> wird gesungen, getanzt und gelacht.	
	Expl is sung, danced and laughed	
	"People are singing, dancing and laughing."	

⁸ Of course, the topmost XP of the Split-IP (e.g. TP) would be closer to SpecFinP than these XPs but the topmost XP does not qualify as a candidate for movement to SpecFinP. If SpecFinP is associated with a subject-of-predication feature (see below) this restriction becomes plausible because the topmost XP is the predication rather than the subject of the predication.

(i) Einer alten Frau wurde die Handtasche gestohlen. [an old woman]-Dat was the handbag stolen

The Dative DP is probably highest in the vP/VP but it is definitely not the highest element in the Split-IP as definite subjects occupy a fairly high position in the I-system (cf. Mohr 2004, 2005). Therefore the Dative DP must be associated with a feature that allows it to move across the definite subject to SpecFinP without violating any locality constraints.

⁶ Fin selects the topmost category of the Split-IP as its complement. Whether it is always the same category that is selected by Fin or not depends on whether categories that are not used in a particular language or construction are completely absent from the structure or just inert. If the category selected by Fin varies, it can be either some adverb-related category, a TopP or FocP as in constructions involving Scrambling (cf. Mohr 2004, 2005), or a category hosting a subject position.

⁹ Sentences like (7b) (repeated as (i) here) suggest that even the neutral position SpecFinP is associated with the checking of a feature, which I assume to be a subject-of-predication feature.

This argumentation predicts that if we have an object that has scrambled over an indefinite subject, this subject can only show up in sentence-initial position if it is topicalised or focussed because it is not the element closest to SpecFinP in this case. The example in (14) confirms this prediction because the subject *ein Kind* ("a child") has to be focussed.¹⁰

(14) [Context: Irgendjemand hat giftige Köder ausgelegt und schon mehrere Hunde und Katzen sind daran eingegangen. Someone has laid out poisoned baits and several dogs and cats have died.]

> Ein KIND hat einen solchen Köder glücklicherweise noch nicht gegessen. *a child has a such bait fortunately not yet eaten* "Fortunately, no child has eaten such a bait yet."

This association with a topic or focus feature is the default case when it comes to objects, more complex adverbials, PPs and VPs. As these XPs are usually not closest to the C-system, they have to carry a feature that has to be checked against the head of one of the discourse related projections of the Split-CP to be able to move across the subject DP which would be the default candidate for the sentence-initial position. Probably this feature makes sure that the XP is brought to (a SpecTopP or SpecFocP at) the edge of the Split-IP and therefore *is* the element closest to FinP. This device resembles the phase-based approach although IP/TP is standardly not considered to be a phase (Chomsky 1999 ff.; but see Butler 2004 for an alternative view).

	neutral	special discourse function	SpecFinP	SpecFocP/ SpecTopP
subject DPs	\checkmark	\checkmark	\checkmark	✓
Dative objects in passives	\checkmark	\checkmark	\checkmark	✓
Experiencer DPs of	\checkmark	\checkmark	\checkmark	✓
impersonal psych-verbs				
temporal and locative	\checkmark	\checkmark	\checkmark	\checkmark
adverb(ial)s that create a				
setting				
other object DPs	Х	\checkmark	Х	\checkmark
other adverb(ial)s	Х	\checkmark	Х	✓
PPs	X	\checkmark	X	\checkmark
(remnant) VPs	X	\checkmark	X	\checkmark

Therefore the entries in Table 1 can directly be translated into structural positions in which the respective XPs can occur, as can be seen in Table 2.

Table 2: structural position of sentence-initial XPs

As always only one specifier of the Split-CP is used, it could be argued that an unsplit CP where topic and focus come in as features of C° would suffice for German (Müller p.c.) and this is exactly what Frey (2000) proposes. Apart from the fact that he assumes an unsplit CP, Frey's system is very similar to mine. He suggests that SpecCP could simply be filled by merger of an expletive or by "stylistic fronting". In the latter case, which just serves to satisfy the V2 requirement, the phrase that is highest in the *Mittelfeld* is fronted to the sentence-initial position and this operation is completely unmarked and "contextually neutral". It usually applies to subjects, Dative DPs of passive constructions and temporal and frame adverbials (Frey & Pittner 1998) and it cannot apply whenever there is a sentence topic, which marks the left edge of the I-system. This definition of "stylistic fronting" describes in slightly different

¹⁰ This argumentation relies on Frey's (2000) assumption that the sentence adverb *glücklicherweise* "fortunately" marks the right edge of the (upper) topic area of the I-system.

words exactly what I said about the group of XPs that can occupy SpecFinP. On the other hand, C can also be associated with a semantic or pragmatic feature, such as [fok] or [link], according to Frey. Fronting of an XP to check these features results in the sentence not being contextually neutral any more but having a certain semantic or pragmatic effect. This option corresponds to movement to SpecFocP and SpecTopP in my system.

As a reply to this scepticism against a Split-CP in German, I argue that the reason for why we cannot have a "neutral" XP together with, e.g., a topic XP is that the topic always passes through SpecFinP on its way to SpecTopP. This analysis is supported by doubling structures like the one in (15) where, on its way to SpecTopP, the complex DP [$_{DP2}$ den [$_{DP1}$ diesen Satz]] (cf. Belletti 2003) leaves the resumptive pronoun behind in SpecFinP.

(15) *Diesen Satz, den mag ich einfach nicht.* (German) this-Acc sentence, that-Acc like I simply not "This sentence, I simply don't like (it)."

Therefore I assume that any topicalised or focussed XP^{11} moves through SpecFinP first before it moves on to its final destination. In addition, (15) illustrates that the verb does not move to a higher head position in the Split-CP but stays in Fin[°].

Last but not least, the structure proposed here, namely the assumption of a Split-CP for German, too, has the advantage that it can account for the data that proved problematic for Schwartz & Vikner (1996) and which I repeat here as (16) and (17).

(16) a. *Das Kind hat das Buch gelesen.* the child has the book read

(German)

- b. *Es hat das Buch gelesen.* it has the book read
- (17) a. *Dieses Buch hat das Kind gelesen.* this book has the child read "This book, the child has read."
 - b. **Es hat das Kind gelesen.* it has the child read

Es, being a weak, unstressed pronoun, cannot be topicalised or focussed, or in other words, it cannot occur in sentence-initial position if it stands for an object DP because an object DP always has to target a discourse-related projection of the Split-CP. This analysis is supported by the fact that if we choose the strong pronoun *das* ("this") instead of *es* ("it") the sentence-initial pronominal object becomes grammatical (cf. (18)). If *es* stands for a subject DP in SpecFinP, however, no problem arises.

(18) *Das hat das Kind gelesen.* this has the child read "This one, the child has read."

Thus my analysis comes close to Travis' (1984) asymmetric explanation which relied on the assumption that objects but not subjects carry focal stress and move to SpecCP.

¹¹ One might object that focussed XPs, contrary to topicalised XPs, are associated with new information and should therefore not be able to check the sop-feature. Butler (2004), however, points out that "the stress marking found on external focussed elements [= focussed elements in the left periphery; S.M.] corresponds not to the new information reading of postverbal subjects, but rather to a contrastive reading".

5. XPs on the edge – some thoughts on phase-based approaches

5.1. A minimalist clause structure, phases and V2

If one assumes the phase model as suggested by Chomsky (1999) with CP and vP, but not TP being phases, the asymmetric approach predicts that subject-initial (= TPs) and non-subject-initial (= CPs) V2 clauses behave differently with respect to the tests for phasehood (for a list of tests see Matushansky 2003). Most of these tests, however, are problematic for *all* types of declarative V2 clauses; in addition, some tests are simply tests for A'-positions and it is debatable whether an outer SpecTP could be considered an A'-position. Therefore the phase-based approach à la Chomsky (1999) does not provide a conclusive answer to the question whether all V2 clauses have the same structure or not.

5.2. A cartographic clause structure, phases and V2

In Mohr (2004, 2005) I argue for a cartographic clause structure with, amongst others, several TopPs and FocPs. More precisely, I assume that there is a layer of semantic projections on top of vP, TP and FinP. Following Butler (2004) and McNay (2005), these semantic projections can be considered to constitute the edge of a phase. Provided this assumption is correct, the clause structure I propose consists of (at least) three phases, vP, TP and FinP (if one defines phases by their main functional projection). With TP also being a phase, both subject-initial and non-subject-initial V2 clauses should pattern alike with respect to tests for phasehood, no matter whether the symmetric or the asymmetric approach is correct.

Thus, it seems to amount to a question of belief whether one uniformly treats V2 as a phenomenon of the (Split-)CP or not. Co-ordination structures as in (19), however, nevertheless provide an argument in favour of the symmetric approach.

(19) Standpauken hört man sich nicht gerne an und (sie)¹² dressing-down-Pl listens one REFL not with-pleasure to and (they) verfehlen deshalb ihre Wirkung nicht.
 miss therefore their effect not roughly: "One does not like to be given a dressing-down and therefore a dressing-down is effective."

Here an object-initial V2 clause is co-ordinated with a subject-initial V2 clause and it is standardly assumed that only constituents that have the same categorial status can be co-ordinated. Therefore it is unlikely that in (19) we co-ordinate a CP and an IP. In my analysis, however, (even if subjects and objects target different specifiers within the Split-CP) the two conjuncts are both (extended) CPs and thus can be co-ordinated.

6. Conclusion

In this paper I argue that declarative V2 clauses uniformly target the C-system, as advocated by the symmetric approaches to V2. On the other hand I suggest, as the use of the term Csystem indicates, that German has a Split-CP and that the sentence-initial XPs of V2 clauses target different specifier positions within this Split-CP, depending on their discourse function. Subjects, expletives, adverb(ial)s that create a setting, Dative object DPs of passives and Experiencer DPs of impersonal psych-verbs, i.e. all the XPs that can show up in sentence-initial position with neutral stress and interpretation, end up in SpecFinP, while all the other XPs can

¹² For some speakers *sie* ("they") can be omitted as *Standpauken* ("dressing-down-Pl") has the same form in the Nominative Case and in the Accusative Case.

only appear sentence-initially if they fulfil a special discourse function and therefore move to SpecTopP or SpecFocP.

Thus this analysis combines the advantages of the symmetric and the asymmetric approaches because it confines the V2 phenomenon to the C-domain and can nevertheless account for the fact that there are some differences in behaviour with respect to the different kinds of XPs in sentence-initial position.

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