

Verb Positions and Basic Clause Structure in Germanic

Jan-Wouter Zwart

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Summary

Verb-second refers to a word order pattern where the finite verb appears to the immediate right of the first constituent. In canonical verb-second languages (German, Dutch, Afrikaans, Frisian, Danish, Norwegian, Swedish), verb-second is limited to main clauses, yielding a main-embedded clause asymmetry, characteristic of the syntax of many Germanic languages. In the standard generative analysis, dating from the 1970s, the derivation of the verb-second pattern involves two ordered steps: 1, verb-movement to the complementizer position C, and 2, XP-movement of an arbitrary constituent to the specifier position of CP. While this analysis remains a popular starting point for generative treatments of Germanic verb-second, later developments have posed serious problems for the approach. These developments include (i) the articulation of a more detailed structure of the functional domain of the clause, providing a range of possible landing sites for the finite verb in verb-second clauses, (ii) higher standards of descriptive and explanatory adequacy, necessitating well-motivated triggers for each individual movement step, (iii) the development of the minimalist program, involving a sharper definition of what counts as syntactic operations, allowing for the possibility that certain processes previously considered syntactic are now better regarded as postsyntactic linearization processes, and (iv) the widening of the empirical scope of verb-second research, including a range of related phenomena (such as verb-first or verb-third orders) not easily accommodated within the traditional frame. These developments make the study of verb-second an exciting field in current syntactic theory, in which the varied and well-studied phenomena of Germanic continue to provide a fertile ground for advancement of theory and description.

Keywords

verb-second, Germanic syntax, head movement, clause structure, complementizer agreement, main-embedded clause asymmetry, verb-first, verb-third, generative grammar

1. The V2-phenomenon

1.1 The basic pattern

‘Verb-second’ or ‘V2’ refers to a word order pattern where a finite verb appears in the second position of the clause. In the unmarked case, this applies in *main (independent) clauses* only, resulting in a main-embedded clause asymmetry that is characteristic of the clausal syntax of many Germanic languages.

(1) Dutch, main clause

a. Tasman **ontdek-te** in 1642 Nieuw-Zeeland

Tasman discover-PAST.SG in 1642 New Zealand

‘Tasman discovered New Zealand in 1642.’

b. * Tasman in 1642 Nieuw-Zeeland **ontdek-te**

Tasman in 1642 New Zealand discover-PAST.SG

(2) Dutch, embedded clause

a. ... dat Tasman in 1642 Nieuw-Zeeland **ontdek-te**

COMP Tasman in 1642 New Zealand discover-PAST.SG

‘... that Tasman discovered New Zealand in 1642.’

b. * ... dat Tasman **ontdek-te** in 1642 Nieuw-Zeeland

COMP Tasman discover-PAST.SG in 1642 New Zealand

‘Second position’ is defined in terms of constituents, the finite verb in V2-clauses appearing after the first *constituent*, not after the first *word*:

(3) *Dutch, main clause*

- a. Weinig mens-en **wet-en** dat
 few human-PL know-PL DEM.DIST

‘Few people know that.’

- b. * Weinig **wet-en** mens-en dat
 few know-PL human-PL DEM.DIST

We refer to the second position in the V2-pattern as the *V2-position*.

The V2-pattern is (typically) not sensitive to the nature of the first constituent. Fronting of any nonsubject constituent will also be accompanied by V2:

(4) *Dutch, nonsubject first constituent*

- a. In 1642 **ontdek-te** Tasman Nieuw-Zeeland
 in 1642 discover-PAST.SG Tasman New Zealand

‘Tasman discovered New Zealand in 1642.’

- b. Welk land **ontdek-te** Tasman in 1642 ?
 which country discover-PAST.SG Tasman in 1642

‘Which country did Tasman discover in 1642 ?’

Nonfinite verbs do not appear in the V2-position. As a result, a verbal piece consisting of a finite auxiliary and one or more nonfinite verbs, appearing as a verb cluster in embedded clauses, will be split up by the V2-pattern in main clauses:

(5) *Dutch, verb clusters in embedded (a) and main (b/c) clauses*

a. ... dat Tasman in 1642 Nieuw-Zeeland **heeft** **ontdek-t**
 COMP Tasman in 1642 New Zealand AUX.SG discover-PTCP
 ‘... that Tasman discovered New Zealand in 1642.’

b. Tasman **heeft** in 1642 Nieuw-Zeeland **ontdek-t**
 Tasman AUX.SG in 1642 New Zealand discover-PTCP
 ‘Tasman discovered New Zealand in 1642.’

c. * Tasman **heeft** **ontdek-t** in 1642 Nieuw-Zeeland
 Tasman AUX.SG discover-PTCP in 1642 New Zealand

(The verb cluster *heeft ontdekt* consists of a finite auxiliary and a nonfinite past participle.)

1.2 Distribution

The *canonical* V2-pattern described above is found in the standard varieties of (High and Low)

German, Dutch, Afrikaans, and Frisian (all Continental West-Germanic), and in the Mainland Scandinavian languages Swedish, Danish, and Norwegian (North-Germanic). In North-Germanic, where the object does not precede the verb, the asymmetry between main and embedded clauses is not always immediately apparent, and needs to be brought out by negation or adverbs:

(6) *Danish, main vs. embedded clause*

a. Johan **spis-er** (ofte) tomat-er

John eat-PRES often tomato-PL

‘John often eats tomatoes.’

b. ... at Johan (ofte) **spis-er** tomat-er

COMP John often eat-PRES tomato-PL

‘... that John often eats tomatoes.’

All these languages can, under specific conditions, treat embedded clauses like main clauses, as a result of which the V2 pattern shows up in embedded clauses as well (see 4.3). In Mainland Scandinavian and Frisian, embedded V2 occurs in the contexts identified by Hooper and Thompson (1973) as allowing embedded root phenomena in English. Roughly, in these contexts the embedded clause expresses the main assertion of the utterance, leading to restrictions on the nature of the main clause (e.g. it must not be negative or nonrealis):

(7) *Frisian, embedded V2 allowed*

a. Pyt sei dat hy my sjoe-n **hie**

Pete say:PAST.3SG COMP 3SG.NOM 1SG.ACC see-PTCP have:PAST.3SG

‘Pete said that he saw me.’

b. Pyt sei dat hy **hie** my sjoe-n

Pete say:PAST.3SG COMP 3SG.NOM have:PAST.3SG 1SG.ACC see-PTCP

‘Pete said that he saw me.’

(8) *Frisian, embedded V2 not allowed*

a. Pyt betreur-et dat hy my sjoe-n **hie**

Pete regret-3SG COMP 3SG.NOM 1SG.ACC see-PTCP have:PAST.3SG

‘Pete said that he saw me.’

b. * Pyt betreur-et dat hy **hie** my sjoe-n

Pete regret-3SG COMP 3SG.NOM have:PAST.3SG 1SG.ACC see-PTCP

‘Pete said that he saw me.’

This is also the case in colloquial Dutch (Zwart 2011:123) and colloquial Afrikaans (Biberauer 2002). In Standard German, embedded V2 occurs in similar contexts (Freywald 2013:327f), but always without the complementizer:

(9) *German, embedded V2*

a. Maria glaub-t dass Peter nach Hause **geh-t**

Mary believe-3SG COMP Peter to house go-3SG

‘Mary believes that Peter is going home.’

- b. Maria glaub-t (*dass) Peter **geh-t** nach Hause
Mary believe-3SG COMP Peter go-3SG to house

‘Mary believes that Peter is going home.’

Standard German also allows embedded V2 in adjunct clauses introduced by *weil* ‘because’.

In Yiddish (Continental West-Germanic) and Icelandic (Insular North-Germanic), V2 occurs in both main and embedded clauses:

(10) *Icelandic, no main/embedded clause asymmetry*

- a. Jón **borð-ar** oft tómát-a
John eat-PRES.3SG often tomato-INDEC.ACC.PL
‘John often eats tomatoes.’

- b. ... að Jón **borð-ar** oft tómát-a
COMP John eat-PRES.3SG often tomato-INDEF.ACC.PL
‘... that John often eats tomatoes.’

The asymmetry between main and embedded clauses returns, though, with interrogatives, where the finite verbs shifts to second position (following the interrogative phrase) in main clauses, but not in embedded clauses (Thráinsson 2007:28, cf. also Den Besten and Moed-van Walraven 1986:114-116):

(11) *Icelandic, main/embedded clause asymmetry with interrogatives*

a. **Las** Jón ekki bók-ina ?

read-PAST.3SG John NEG book-DEF.ACC.SG

‘Didn’t John read the book?’

b. ... hvort Jón læsi aldrei bók-ina

whether John read:SUBJ.PAST.3SG never book-DEF.ACC.SG

‘... whether John never read the book.’

The status of Faroese (Insular North-Germanic, but heavily influenced by Danish) appears to be in flux (Heycock et al. 2012).

In English declarative clauses, the V2-pattern is entirely absent, but here, too, it returns in (nonembedded) interrogative clauses, and limited to auxiliaries (*residual V2*, also with focused negative phrases, cf. (39); see Woods 2020:298f on the grammaticality of (12b) in varieties of English):

(12) *English, residual V2*

a. When **did** Cook visit the Cook Islands ?

b. * I wonder when **did** Cook visit the Cook Islands

Afrikaans shows the pattern of classical verb-second languages, with frequent embedded verb-second in the spoken variety (Biberauer 2002).

2. Analysis of the V2-pattern

2.1 Derivation

The V2-position is occupied by the verb only when two specific conditions are met: the verb must be finite, and the clause must be independent. This makes the V2-pattern a *marked* pattern, a deviation from the unmarked pattern where the verb appears towards the end of the clause.

In terms of a derivational model of grammar, this entails that the V2-position is a derived position, and that the position of the verb towards the end of the clause is the more basic one. In the generative tradition, the derived nature of the V2-position was argued for as early as Bach (1962:268f) and was universally adopted on the strength of the argumentation in Koster (1975).

One of Koster's arguments involved particle verbs in Dutch, where the particle appears adjacent to the verb in embedded clauses, but not in main clauses:

(13) *Dutch, V2 with particle verbs*

- a. ... dat Tasman Cook op bel-t
 COMP Tasman Cook up ring-3SG
 '... that Tasman calls Cook.' [*op-bellen* 'call, telephone']
- b. Tasman bel-t Cook op
 Tasman call-3SG Cook up
 'Tasman calls Cook.'

On the assumption that the particle verb is a lexical item, the word order in (13b) must be the result of a movement operation, either moving the particle *op* ‘up’ to the right from a basic position still occupied by the finite verb *belt* ‘calls’ (the V2-position), or moving the finite verb *belt* ‘calls’ to the left from a basic position still occupied by the particle *op* ‘up’. In the first scenario, we need *both* particle movement and verb movement to derive the embedded clause order (13a), while in the second scenario, we need no movement at all to describe the embedded clause pattern. The second scenario, involving verb movement to the left, is more economical, and therefore the more eligible one.

This argument, among others pointing in the same direction (see Zwart 2011:248f for more discussion), leads to the conclusion that *the V2-pattern is derived by verb movement to the left*.

2.2 The connection with the C-position

The observation that the V2-pattern is derived by verb movement to the left naturally leads to further questions: (a) what is the nature of the V2-position, and (b) why does the verb move there?

These questions were insightfully addressed as early as Paardekooper (1961), who noted that the verb in inversion constructions (such as (4)) has the same distributional properties as the complementizer introducing finite embedded clauses, and that the complementizer, like the verb, expresses tense and mood features (and sometimes even subject agreement features, in the phenomenon of complementizer agreement, see 4.2). These considerations were later replicated and augmented in Den Besten (1977), leading to the conclusion that (a) the V2-position is the complementizer position, and (b) verb movement is really movement of tense/mood features, carried by the verb (Den Besten 1981, also Evers 1981).

The parallel distribution of the complementizer and the verb (in inversion) can be illustrated by facts like the following, showing adjacency of the verb/complementizer and subject clitics:

(14) *Dutch, similar distribution verb in inversion and complementizer*

- a. ... **dat** (*in 1642) **ie** Nieuw-Zeeland ontdek-t heeft
 COMP in 1642 SCL:3SG.NOM New Zealand discover-PTCP AUX:3SG
 ‘...that he discovered New Zealand (in 1642).’

- b. **Heeft** (*in 1642) **ie** Nieuw-Zeeland ontdek-t ?
 AUX:3SG in 1642 SCL:3SG.NOM New Zealand discover-PTCP
 ‘Did he discover New Zealand (in 1642) ?’

Also, the verb could be shown to occupy the same position as the interrogative complementizer in pairs like:

(15) *Dutch, similar distribution verb in inversion and complementizer*

- a. (ik vraag me af) welk land **of** Tasman ontdek-t heeft
 I wonder which land COMP:INT Tasman discover-PTCP AUX:3SG
 ‘(I wonder) which land Tasman discovered.’

- b. Welk land **heeft** Tasman ontdek-t ?
 which land AUX:3SG Tasman discover-PTCP
 ‘Which land did Tasman discover?’

To describe the V2-pattern, then, we needed a rule moving the finite verb to the complementizer position (initially COMP, later, with the articulation of the clausal structure in Chomsky 1986, the head of the Complementizer Phrase [CP], C):

(16) *Verb second part 1*

Move the finite verb to C

To obtain the V2-pattern, (16) must be supplemented with another rule, moving either the subject or in fact any other phrase into the position preceding the finite verb (initially, this position was part of the COMP-complex, but in the CP-IP structure of Chomsky 1986, it was naturally identified as the specifier position of CP):

(17) *Verb second part 2*

Move XP to Spec,CP

Only the conjunction of (16) and (17) yields the V2-pattern.

It was immediately clear (as pointed out by both Paardekooper and Den Besten) that the evidence in (14)-(15) supporting (16) has no direct bearing on the V2-position in subject-initial clauses (like (1a)). But in the context of the (Revised) Extended Standard Theory of generative grammar, where phenomena were derived via construction specific transformations, and it was considered desirable to keep the number of those to a minimum, it was fully justified to maximize the scope of (16), and to consider it to apply to subject-initial clauses as well (Den Besten 1977:9). As a result, (17) does not specify the nature of the phrase moving into the Spec,CP position: XP

must be the subject in subject-initial main clauses, or any other XP in inversion constructions.

Consequently, the term *V2-constraint* can be found in the literature to refer to the conjunction of (16) and (17), but also more narrowly to (17), an operation not involving the verb at all.

2.3 Doubts about generalized V-to-C movement

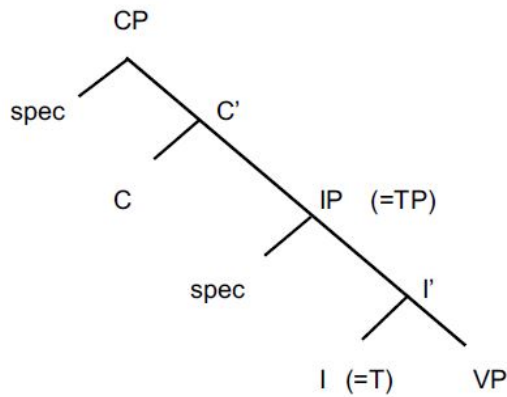
When the (Revised) Extended Standard Theory of generative grammar was succeeded by the Government and Binding Theory (GB-Theory, Chomsky 1981, 1982), the automatic support for the generalized V-to-C analysis of the V2-pattern disappeared. In GB-Theory, individual construction specific transformations were replaced by the general movement operation Move α , and the need to reduce the number of transformations could no longer be formulated. Instead, all and any number of movements (applications of Move- α) were acceptable as long as they helped satisfy the constraints of the modules of grammar (Case Theory, Theta Theory, Binding Theory, etc.).

Part of the new theory was a renewed conception of clause structure, in which functional elements (C, Tense, D [for determiner], Agr [for agreement], and potentially myriad others) projected full fledged phrases (CP, TP, DP, AgrP etc) constituting a functional domain of regularly organized phrase structure on top of the lexical domains of VP and NP. Minimally, a clause consisted of an IP (Inflection Phrase, later called TP for Tense Phrase — here and in what follows, IP and TP are used interchangeably) and a CP on top of VP, even if IP was quickly split up in TP and one or more AgrPs (CP was likewise split up in a number of layers, but not before the GB-Theory was replaced by the Minimalist Program in 1991, see 2.4).

The minimal clause structure of the GB-Theory is given in (18), where the structural subject

position is Spec,IP and the structural position for fronted material is Spec,CP.

(18)



This now made it possible to formulate a new account of the V2-pattern, proposed in Travis (1984), in which the random XP-movement operation (17) could be abandoned. In the new approach, the verb would still move to C in inversion constructions (like (4)), as motivated by the parallel distribution of the complementizer and the verb in inversion, but in subject-initial constructions (like (1a)), where this parallel distribution does not hold, the verb could be taken to move no higher than I (the head of IP). This assumes that Spec,CP and Spec,IP are the structural positions for fronted XPs and subjects, respectively, so that a rule like (17) governing the placement of XPs and subjects becomes largely redundant. If we then assume that the verb moves to I or C, the V2-pattern can be derived without recourse to a random XP-movement rule like (17).

Immediate support for this alternative approach was found in the distribution of weak pronouns in Yiddish (Travis 1984:117). Weak (nonsubject) pronouns cannot be fronted (19), suggesting a generalization that states that no weak pronouns can occupy the Spec,CP position (*ge-* is a completive prefix featuring in the morphological construction of past participles in Continental West-Germanic).

(19) *Yiddish, weak pronouns cannot move to Spec,CP*

- a. Di froy hot es ge-leyen-t
DEF.F woman have:3SG 3SG:INAN GE-read-PTCP
'The woman read it.'

- b. * Es hot di froy ge-leyen-t
3SG:INAN have:3SG DEF.F woman GE-read-PTCP

But weak subject pronouns *can* appear in first position:

(20) *Yiddish, weak subject pronouns appearing in first position*

- Es hot ge-ges-n dos brot
3SG:INAN have:3SG GE-eat-PTCP DEF.N.SG bread
'It ate the bread.'

This is accounted for if weak subject pronouns (and in fact all subjects) occupy a lower position, Spec,IP, and therefore are not subject to the rule banning weak pronouns from Spec,CP. But if that is the correct analysis, the V2-pattern is not a unique property of the CP-level, but can be instantiated at the lower IP-level as well.

Travis' analysis of the V2-pattern led to a new question that was not satisfactorily answered at the time, leading most Germanicists to abandon the approach and stick to the pre-GB analysis in terms of a 'V2-constraint'. This is the question of what blocks the verb from moving to I in embedded clauses, yielding embedded V2 across the board.

However, if Den Besten (1981) and Evers (1981) are right in deriving verb movement from the need to express the tense/mood features in C, and if the complementizer itself is already capable of expressing these features, it follows that nothing would compel the verb to move in embedded clauses. Formally, we may assume that the complementizer comes to host tense/mood-features as a result of I-to-C movement (Hoekstra and Marácz 1989:77). An essentially similar analysis is adopted by Zwart (1993a), who assumes that in embedded clauses Agr-to-C movement takes place, obviating verb movement to Agr, the highest functional head in a split IP-system. These analyses assume that subject-initial main clauses are not CPs but IPs, and must describe the V2-pattern as movement of the verb to the highest functional head of the clause (relativizing (16), and abandoning (17)).

The idea that embedded clauses in canonical V2-languages are characterized by I-to-C movement (obviating embedded V-to-I movement), received further support from the phenomenon of complementizer agreement (already noted in this connection by both Paardekooper 1961 and Den Besten 1977). Complementizer agreement is the expression of subject agreement (for person and/or number) on the complementizer, in addition to the regular subject agreement on the finite verb.

(21) *Frisian, complementizer agreement*

Heit	sei	dat- st	do	soks	net	leauw-e	moat- st
dad	say:PAST.SG	COMP-2SG	2SG	such	NEG	believe-INF	must-2SG

‘Dad said that you should not believe such things.’

Since the subject agreement features originate in I, a plausible account of complementizer

agreement would be that it is the result of the agreement features moving from I to C (first proposed by Hoekstra and Marácz 1989), which would remove I as a target for verb-movement. Crucially, in the embedded V2-clauses of Frisian, complementizer agreement is absent (Van der Meer 1991, Zwart 1993a:291):

(22) *Frisian, no complementizer agreement with embedded V2*

Heit	sei	dat(*-st)	do	moat-st	soks	net	leauw-e
dad	say:PAST.SG	COMP-2SG	2SG	must-2SG	such	NEG	believe-INF

‘Dad said that you should not believe such things.’

These observations suggest that when C carries the features of tense and/or agreement, which (in GB-Theory) originate in lower functional heads (either I, or, when IP is split up, Agr and T), these lower functional heads are no longer available for the verb to move to, and the asymmetry between main and embedded clauses is the result of this inability of the verb to move.

2.4 Views on clause structure in relation to the V2-pattern

While the Den Besten (1977) analysis of the V2-pattern, identifying positions for heads and phrases in the COMP-domain, was instrumental to the development of the CP-structure in Chomsky (1986), conversely the entire CP-IP-structure of (18) was not enthusiastically adopted among students of (non-English) Germanic syntax (see Zwart 2011:252f for a survey). A common position to take was that IP in Germanic languages other than English was either nonexistent or conflated with CP (e.g. Platzack 1983). Alternatively, IP was taken to be present but head-final in

OV-languages like Dutch, German and Frisian (in spite of CP and DP being clearly head-initial), allowing for vacuous verb-movement to the left in embedded clauses (e.g. Den Besten 1986:247). All these views converged on the notion that C was the only functional head in the left-periphery of the clause in V2-languages, strengthening (16), and, by implication, (17) as key elements of the analysis of the V2-pattern.

Ironically, the CP-IP-structure in (18) receives much clearer support from canonical V2-languages than from English. In English, the only elements appearing in I are auxiliaries—finite lexical verbs remain in V, leaving I unfilled and hard to demonstrate (and in fact, even auxiliaries may be in a lower functional head in the IP-system, as they are not necessarily adjacent to the subject in English). In contrast, every subject-initial main clause in a canonical V2-language has the finite verb in a position right-adjacent to the subject. Since Spec,IP is the canonical subject position in GB-Theory, this immediately provides strong empirical evidence for head-initial IP in canonical V2-languages (Zwart 1994).

The idea that there must be head-initial functional projections in the Germanic canonical V2-languages gained further support from the distribution of object clitics (Jaspers 1989, Zwart 1991, Haegeman 1991). The normal order of objects in Dutch is INDIRECT OBJECT—DIRECT OBJECT (23a), but when the direct object is a clitic, it shifts to the left and attaches to the finite verb (23b).

(23) *Dutch, direct object clitic placement*

- a. Hij heeft mijn vader **het** **boek** ge-gev-en
 3SG.M.NOM have:3SG POSS:1SG father DEF.N.SG book GE-give-PTCP
 ‘He gave my father the book.’

- b. Hij heeft 't mijn vader ge-gev-en
 3SG.M.NOM have:3SG OCL.N.SG POSS:1SG father GE-give-PTCP
 'He gave it to my father.'

At the time, it was a common assumption that clitics adjoin to functional heads (e.g. Kayne 1991), and can hence be used to probe the existence of functional heads. Crucially, the object clitic also shifts to the left when the finite verb is located elsewhere:

(24) *Dutch, direct object clitic placement*

- a. **Heeft** hij 't mijn vader ge-gev-en ?
 have:3SG 3SG.M.NOM OCL.N.SG POSS:1SG father GE-give-PTCP
 'Did he give it to my father?'
- b. ... dat hij 't mijn vader **heeft** ge-gev-en
 COMP 3SG.M.NOM OCL.N.SG POSS:1SG father have:3SG GE-give-PTCP
 '... that he gave it to my father.'

It follows that there is a functional head position to the right of the subject in (24), and juxtaposing (24) and (23) shows that the finite verb can be in that position as well.

The reluctance to adopt (18) for Germanic V2-languages became considerably more exceptionalist after Kayne (1994) argued that syntactic phrase structure is universally head-initial and movement is universally leftward. This put analyses of West-Germanic canonical V2-languages (Dutch, German, Frisian) involving a head-final IP—with (vacuous) rightward V-to-I movement in embedded clauses—in need of additional justification, which was not forthcoming.

In a parallel development, it was argued (initially on the basis of data from German and Dutch, by Müller and Sternefeld 1993 and Hoekstra and Zwart 1994, later on the basis of data from North Italian dialects, by Rizzi 1997), that CP is in fact a complex of functional phrases, providing a range of specifier and head positions to the left of the structural subject position, including (at least) ForceP, TopicP, FocusP, and FinP. These proposals would seem to make it impossible to maintain (16) without further elaboration, as it is unclear which functional head is intended by ‘C’. Also, it raises the question why only a single XP can precede the verb, were it to occupy any but the highest functional head position in the CP-domain.

A popular implementation of the split-CP structure identifies a finiteness phrase or FinP as the lowest rung in the CP-domain (Rizzi 1997:283-284). In justifying FinP inside the CP-system, Rizzi explicitly leans on Den Besten (1977) and Holmberg and Platzack (1988), authors who acknowledged the tense and mood features of complementizers, but not a separate I-head as the source of these features. In Rizzi’s proposal, FinP exists *next to* IP, and Fin (the head of FinP) ‘agrees’ with the tense, mood, and agreement features of the IP-system, but is itself ‘more rudimentary’ (see Zagana 2013 for a more probing elaboration of FinP in this context).

In the more recent literature on the V2-pattern (cf. Lohnstein and Tsiknakis 2020, Woods and Wolfe 2020), FinP acts like the CP of earlier V2-analyses, so that it is Fin that attracts the verb according to (16), and Spec,Fin that attracts a random XP according to (17)(going back to Haegeman 1997). In subject-initial main clauses, that XP is the subject, elsewhere it can be any other type of XP. These XPs will then have to be expedited to designated specifier positions higher up in the CP-domain (having to do with topic, focus, etc.), raising the ‘bottleneck’ question of how to block more than one XP from moving to the left of the verb (see Holmberg 2020). Other proposals exist as well, distinguishing ‘low V2 languages’, where the C of (16)/(17) equals Fin,

from ‘high V2 languages’, where C equals Force (the highest functional head in the CP-system)(e.g. Grewendorf 2010). Modulo the replacement of C by Fin/Force, these analyses all stay within the paradigm of (16)/(17).

3. Theoretical issues

3.1 Triggers for movement

Since the V2-pattern involves displacement of two elements, the verb (16) and some XP (17), a central question is which of these movements comes first. Implicit in the paradigm of (16)/(17) is that verb-movement to C (or Fin) comes first, forcing additional XP-movement because of the V2-constraint (17). This ordering is inherited from the pre-GB analysis of Den Besten (1977), which hinges on the observation that the verb shares the distributional properties of the complementizer (at least in inversion constructions), and therefore *must* be in C, forcing us to postulate an additional random XP-movement (17) to derive the V2-pattern.

However, in the GB-Theory standards for explanatory adequacy were raised, forcing us to come up with triggers for movements, to be formulated in terms of constraints belonging to the various modules of grammar (such as the Case Filter, the Theta Criterion, the Empty Category Principle, etc.). As discussed at length in Weerman (1989) and Vikner (1995), coming up with such a trigger for (16) was not obvious.

Moreover, the V2-constraint itself was not an acceptable trigger for the XP-movement in (17), as it did not refer to any known constraint of the GB-modules. In fact, placement of the subject in Spec,IP (either by movement or base-generation) was fully motivated by the case-assignment rules

of GB-Case theory (according to which the subject is assigned nominative Case by I via Spec-Head agreement). Likewise, Spec,CP was considered a designated landing site for A'-movement of topics and focused elements, and a locus for checking of the wh-features of question words. (The split-CP proposals referred to above were mainly motivated by the need to further articulate the loci in the left-periphery of the clause where features of A'-moved elements could be checked.)

Since the GB-Theory had bona fide triggers for XP-movements to the left periphery of the clause, the XP-fronting rule (17) became redundant. Combined with the unclear trigger for verb-movement, this made the alternative ordering of verb-movement *following* XP-movement vastly more attractive (e.g. Poletto 2000:94). This entailed eliminating (17) and abandoning (16) in favor of something like (25).

(25) *Verb-second*

Move the finite verb to the head of the highest functional projection hosting an XP.

Since 'the highest functional projection hosting an XP' varies with the kind of XP (subject, topic, focus phrase, wh-element), it followed that the V2-pattern could no longer be rigidly tied to any particular functional projection. It was not generally recognized that this amounts to a justification of the approach advocated by Travis (1984).

3.2 Verb-second in minimalism

The Minimalist Program for linguistic theory, introduced by Chomsky in 1991 (see Chomsky

1995), takes syntax to be the optimal resolution of conditions imposed by the interfaces dealing with sound and meaning. The only syntactic operation left is Merge, the derivational step that combines two elements in a set. Merge can be applied recursively, yielding hierarchical structure.

A condition on Merge is that one of the elements involved must be the entire structure at that point in the derivation (i.e. the ‘root’ of the tree structure):

(26) *Extension condition*

When α merges with β , β must be a root

In (26), α can be a new element (external Merge), or can be a subpart of β (internal Merge = movement).

The structure generated by Merge must be interpretable to the interface components (i.e. the terminal nodes in the tree structure carry features that the interface components must be able to ‘read’). One assumption is that for a derivation to converge, features that are not interpretable to the interface components must be eliminated, and that movement is the way to eliminate these features via a local feature checking operation. While this leaves the rationale for XP-movement largely intact (subjects still move to Spec,IP—now referred to as TP, for Tense Phrase—and topics, focused elements, and wh-elements still move to A’-positions in the CP-domain), it does affect the status of verb-movement, or head-movement more generally, as head-movement never targets the root of a clause, but the head of the root (Chomsky 2001).

Chomsky (2001) therefore argues that verb movement (including verb-second) cannot be a rule of syntax, and must instead be the effect of some linearization requirement of the interface component dealing with morphology and phonology (the Phonetic Form or PF of earlier stages of

generative grammar). In this connection, Chomsky notes that verb-second typically does not affect meaning (see also Freitag 2021, chapter 3), and therefore should not be thought of as a rule of syntax (now called ‘narrow syntax’, excluding syntactic phenomena that ought to be relegated to PF).

The observation that verb-second does not affect meaning has been challenged, most notably by Lechner (2006) and Truckenbrodt (2006), the latter more specifically relevant to verb-second in Germanic. Truckenbrodt observes that minimal pairs of declarative, interrogative and imperative clauses that differ in the position of the finite verb, such as interrogative (27), differ in that only the clause type with the finite verb fronted expresses a certain illocutionary force (see also Wechsler 1991):

(27) *fronted verb expressing illocutionary force in German*

a. **Regne-t** es ?

rain-3SG 3SG.NTR

‘Is it raining?’

b. Ob es **regne-t** ?

COMP:INT 3SG.NTR rain-3SG

‘I wonder whether it is raining.’

Only in (27a) does the question have the illocutionary force of an appeal to the addressee. However, the correlation of illocutionary force with verb movement does not entail that one is caused by the other. In other words, the features relevant to the interpretation may trigger verb

movement, as Truckenbrodt supposes, or they may be inherent properties of certain main clauses, which coincidentally also display verb movement. As a matter of fact, the correlation between finite verb fronting and illocutionary force breaks down in other verb-second languages such as Kashmiri (Freitag 2021:61f) and Dutch, where (27b) is realized with a fronted modal verb (*Zou het regenen?* [would it rain] 'I wonder whether it is raining').

The problem that head-movement does not target the root was addressed by Matushansky (2006) and Fanselow (2009), who explore the idea that a head in fact does merge to the root when it moves, after which some readjustment takes place (morphological merger of the moved head with the head of the root in Matushansky's analysis, reprojection of the categorial features of the moved head in Fanselow's analysis) to bring the resulting structure in line with minimalist phrase structure. These proposals would have the effect of salvaging the syntactic nature of head movement, but the cost of introducing additional mechanisms would have to be weighed as well.

The postsyntactic perspective on verb-second has not been fully explored, though a first outline was proposed in Zwart (2005). Since verb-second positions the finite verb to the immediate right of the first constituent, verb movement could be reformulated as a spell-out rule, forcing the finiteness features (carried by the verbal morphology) to be realized at the left edge of the first constituent's sister (see also the discussion in Fanselow 2009, who attributes the concept of 'squeezing in' the verb behind the first constituent to Bierwisch 1963; see also Thiersch 1978:21). This approach would have the advantage of connecting verb-second directly to Merge, even if it is de facto a postsyntactic linearization operation.

4. Empirical issues

Notwithstanding the general uniformity of verb-second phenomena across canonical verb-second languages, there is no shortage of facts deviating from the common pattern in one way or another. The literature on these topics is growing (see e.g. Antomo and Müller 2018, Woods and Wolfe 2020), and what follows can be no more than an indication of the relevant phenomena and their consequences for the analysis of verb-second and for clause structure more generally.

4.1 Verb-second deviations

All Germanic verb-second languages also allow verb-first word orders in circumscribed contexts, including yes/no-questions, imperatives, conditionals, topic drop, and connected narratives.

(28) *verb-first constructions*

a. *yes/no-questions, Yiddish* (Den Besten and Moed-van Walraven 1986:114)

(Tsi) **hot** er ge-leien-t dosbux ?

Q AUX:3SG 3SG.M.NOM GE-read-PTCP DET.N book

‘Has he read the book?’

b. *imperatives, Dutch* (Bennis 2007:121)

Kom jij eens hier !

come:SG.IMP 2SG.NOM once here

‘Come here, you!’

c. *conditionals, Swedish* (Platzack 1986:47)

Kommer hon, så går jag
come 3SG.F.NOM so go 1SG.NOM
'If she comes, I go.'

d. *topic drop, German* (Cardinaletti 1990:75)

Hab ich gestern ge-kauf-t
have:1SG 1SG.NOM yesterday GE-buy-PTCP
'I bought it yesterday.'

e. *narrative inversion, Icelandic* (Thráinsson 1986:173)

Kom-a þeir nú að stór-um hell-i ...
come-3PL 3PL.NOM now to big-M.DAT.SG cave-DAT.SG
'Then they get to a big cave...'

These are generally brought in line with the verb-second pattern by assuming an empty operator as the first constituent (in fact, a different empty operator for each type), optionally made overt in yes/no-questions in Yiddish (28a). The various empty operators assumed in this connection show a complementary distribution, so that e.g. a topic drop example cannot at the same time receive any of the other interpretations associated with verb-first word order.

The empty operators involved with the verb-first pattern are typically assumed to be base generated in the specifier position of CP (or of a particular phrase within a split CP), instead of being moved there from inside the clause. This means that (17) does not apply, unless 'move' were

to be reformulated as ‘move or merge (externally)’. But clearly the empty operator is not merged in Spec,CP to satisfy (17), but to express relevant features of clausal semantics. A more natural analysis, then, would take the verb movement to be triggered by the presence of the empty operator, rather than the other way around (see section 3a).

More interesting are cases of verb-third, where the finite verb is preceded by two constituents (see Wiese and Müller 2018 for a recent survey). Here, various types need to be distinguished, depending on the nature of the constituents preceding the finite verb.

(29) *(typically) subject-XP-verb*

a. *discourse particles, Dutch* (Zwart 2005:28)

Dit voorstel echter **is** onacceptabel
DEM.SG proposal however be:3SG unacceptable
‘This proposal however is unacceptable.’

b. *focus particles, Norwegian* (Nilsen 2002:152)

Jens bare **gikk**
Jens justgo:PAST
‘Jens just left.’

(30) *XP-subject-verb*

a. *German urban vernacular (Kiezdeutsch)* (Wiese 2009:787)

Morgen ich **geh** Arbeitsamt

tomorrow 1SG.NOM go:1SG job.center

‘Tomorrow I’m going to the job center.’

- b. *West Flemish* (Haegeman and Greco 2018:228)

Tegen de avond ’t **begost** te smor-en

towards DET evening it begin:PAST.SG INF fog-INF

‘Towards the evening, the fog set in.’ [lit. ‘it started to fog’]

- c. *Short wh-element questions, Tromsø Norwegian* (Westergaard and Vangsnes 2005)

Ka ho **sa** ?

what 3SG.F say:PAST

‘What did she say?’

(31) *XP-XP-verb*

- a. *Frame-setting adverbial clauses, Dutch* (after Haegeman and Greco 2018:235)

Als mijn handout klaar is, aan wie **moet** ik

when POSS.1SG handout ready be:3SG to who must:SG 1SG.NOM

hem dan gev-en ?

3SG.ACC then give-INF

‘Once my handout is done, who should I give it to?’

b. *Resumption, Dutch* (Broekhuis and Corver 2016:1702)

Deze jongen-s, die ken ik niet

DEM:PL boy-PL DEM know:1SG 1SG.NOM NEG

‘These boys, I don’t know them.’

c. *Resumption, Norwegian* (Meklenborg 2020:99)

Derfor, så har jeg ikke gjort det ennå

therefore so AUX:PRES 1SG.NOM NEG do:PTCP 3SG.N yet

‘Therefore, I haven’t done it yet.’

The question posed by these verb-third orders is, to what extent their existence forces us to assume more positions than the standard structure in (18) allows. Typically, analyses capitalize on the larger number of positions afforded by the split-CP proposal of Rizzi (1997)(e.g. Grewendorf 2010, Walkden 2017), but that creates the potentially more serious problem of how to account for the strict verb-second pattern in the first place (see the discussion in Holmberg 2020).

The type in (29) involves discourse (29a) or focus (29b) particles whose distribution is prosodically conditioned. The type of *echter* in (29a) is enclitic on the first constituent (Zwart 2005:28), which must not be a weak pronoun; the type of *bare* must immediately precede a focused predicate (Nilsen 2002). These observations make it somewhat plausible that the position of the relevant elements is due to postsyntactic linearization requirements. If so, no revision of the clause structure underlying the verb-second pattern appears to be called for.

The type in (30) is significant in that the second constituent preceding the verb must be the

subject. The pattern in (30a) is described in Walkden (2017) for a range of Germanic urban vernaculars (Walkden 2017:59, while noting that the second constituent in the Kiezdeutsch cases is overwhelmingly the subject, hesitates to conclude that it *must* be the subject, in view of a limited number of cases where the second constituent is a weak adverb; but his examples involve locatives, which we know can appear as subjects, cf. Hoekstra and Mulder 1992).

The pattern in (30a/b) can be straightforwardly described starting from the structure in (18), with the subject in Spec,TP and the first constituent in Spec,CP, on the assumption that in the relevant varieties, (some) additional fronted categories fail to trigger subject-verb inversion (T-to-C movement). This pattern, then, can be taken to reveal an instance of verb movement in canonical verb-second languages (V-to-T movement), that is normally obscured by the subject-verb inversion that occurs when an additional category is fronted. This is consistent with the analysis of verb-second advanced by Travis (1984), while the traditional analysis involving the conjunction of (16) and (17) lacks a straightforward account.

In the North-Norwegian pattern in (30c), the *wh*-element is monosyllabic and “the subject is virtually always familiar or given information” (Westergaard and Vangsnes 2005:126). Based on the distribution of subjects vis-à-vis adverbs, Westergaard and Vangsnes (2005:136) assume different subject positions for given and new subjects, both within the IP-system (containing TP and AgrP). If correct, the pattern in (30c) would again support an analysis of verb-third where the finite verb stays within the IP-system. With new subjects, which are in a lower position inside the IP-system, the authors assume an active Focus head within the CP-system (below the *wh*-position) which attracts the finite verb, yielding verb-second.

The type in (31a) appears to be best analysed as an asyndetic juxtaposition of a frame-setting adverbial and a full-fledged independent clause (Haegeman and Greco 2018). If an additional

functional projection must be assumed to accommodate the first constituent in these cases, such as the FrameP proposed by Haegeman and Greco (2018), that projection must be outside CP (whether split or not)(Haegeman and Greco 2018:35-36).

Next to (31a), West Flemish (but not Standard Dutch) has cases like (30b), where a clause-initial adverbial is followed by a subject-initial main clause. Here again, just like with the type in (30a), the simplest analysis has the subject in Spec,TP and the adverb in Spec,CP, with the finite verb staying in T instead of moving on to C.

Finally, the type in (31b/c) involves resumption of an initial constituent (which can be a subject or a nonsubject) by a demonstrative. This pattern is typically analysed as involving a combination of movement (of the demonstrative) and base-generation (external Merge) of the initial constituent (see Broekhuis and Corver 2016:1704 and subsequent discussion). If so, these may be structurally similar to the type in (31a), involving asyndetic juxtaposition of an initial element and a full-fledged finite clause, or some additional projection outside the CP-system hosting the initial constituent.

In general, then, verb-second deviations in the form of verb-third word orders do not compel us to complicate the structure of the clause beyond what needs to be minimally assumed in (18).

4.2. *Doubling phenomena*

Various doubling phenomena in verb-second clauses may be taken to shed light on the structure of the clause. These include complementizer agreement, doubling person and number features on the complementizer (33), doubling or displaced tense marking in Dutch child language and certain dialects (34), and apokoinou, i.e. finite verb doubling (35):

(33) *Complementizer agreement*

a. *South Hollandic Dutch* (Zwart 1993b:318)

... dat-**te** ze kom-me

COMP-PL 3PL come-PL

‘... that they are coming.’

b. *West Flemish* (Ackema and Neeleman 2004:240)

... da-**n** zunder tegen under wil ge-werk-t ee-n

COMP-3PL 3PL.NOM against POSS:3PL will GE-work-PTCP AUX-3PL

‘... that they worked against their will.’

(34) *Displaced tense-marking* (Barbiers and Van Koppen 2006:29)

a. *Dutch child language*

Dat lust-ik-**te** niet

DEM like-1SG.NOM-PAST.SG NEG

‘I couldn’t eat that.’

b. *Strijen Dutch*

Gisteren wandel-die-**de** door het park

yesterday walk-SCL:3SG-PAST.SG through DET.N park

‘He walked through the park yesterday.’

(35) *Apokoinou, Rotterdam Colloquial Dutch* (Zwart 2005:21)

Dan	was	je	tegenstander	was	neer
then	be:PAST.SG	POSS:2SG	opponent	be:PAST.SG	down

‘Then your opponent was down.’

Of these, the complementizer agreement facts (cf. Van Koppen 2020) appear to be the most relevant, as already observed by Paardekooper (1961) and Den Besten (1981:ii). At issue is the question whether the agreement is a syntactic or morphological phenomenon (cf. Goeman 1980).

From a syntactic perspective, complementizer agreement suggests a connection between the heads of the IP- and CP-systems (Hoekstra and Marácz 1989, Zwart 1993a), which is severed in embedded verb second constructions (see 21/22), but also when the complementizer and TP/AgrP are not adjacent (Ackema and Neeleman 2004:240; but see Van Alem 2022 chapter 3 for much pertinent discussion):

(37) *West-Flemish, complementizer agreement subject to adjacency*

...	da(*-n)	op	den	warm-st-e	dag	van	't	jaar	zunder
	COMP-3PL	on	DET.M	warm-SUP-AGR	day	of	DET.N	year	3PL.NOM

tegen	under	wil	ge-werk-t	ee-n
against	POSS:3PL	will	GE-work-PTCP	AUX-3PL

‘... that on the hottest day of the year they worked against their will.’

Also relevant appears the fact that the agreement on the complementizer, while expressing the same features as agreement on the verb, may receive a different morphological realization from agreement on the verb. Crucially, in dialects that show this discrepancy, the verb in inversion shows the complementizer agreement form, while the verb in subject-initial verb-second clauses shows the verbal agreement form (Zwart 1993a:179f):

(38) *Double agreement, East Netherlandic Dutch*

a. Wie speul-**t**/*-e

1PL.NOM play-PL

‘We are playing.’

b. Waor speul-**e**/*-t wie?

where play-PL 1PL.NOM

‘Where do we play?’

c. ... dat-**te** wie speul-**t**/*-e

COMP-PL 1PL.NOM play-PL

‘... that we are playing.’

If the agreement realization is a function of the syntactic position of the verb, the absence of the -

e ending in (31a) suggests that the verb is not always in C in verb-second constructions (see also Van Alem 2022:22f).

From a morphological perspective, Goeman (2000) and De Vogelaer, Devos and Van der Auwera (2006) observe a similarity between agreement on the complementizer and on the auxiliary in subject-verb inversion constructions, suggesting that complementizer agreement is merely the effect of analogical extension of the auxiliary agreement pattern. This calls into question whether any syntactic mechanism underlying complementizer agreement needs to be assumed, and hence whether any conclusions regarding the structure of the clause can be based on it (see Zwart 2006 for discussion). Likewise, the adjacency effect in (34) may be taken to indicate that complementizer agreement is a post-syntactic spell-out phenomenon (cf. Fuß 2003).

The child language tense marking facts (first discussed in Flikweert 1994) appear to have a similar uncertain status. The phenomenon is limited to subject-verb inversion constructions, where the verb is in C, and where the subject is a pronoun. Barbiers and Van Koppen (2006:29) argue that the position of the tense suffix following the subject pronoun shows that TP is head-initial, on the assumption that the verb, moving through T on its way to C, strands the tense suffix there. But this assumes the preminimalist notion of inflectional affixes being present in narrow syntax, rather than being introduced in a postsyntactic morphology component. Assuming morphology after syntax, the position of the tense suffix in (34) merely reflects properties of inflectional paradigm construction in the morphological component (where the pronoun is taken to be part of the inflected verb form), not necessarily related to the structure of the functional domain of the clause.

The apokoinou example (35), where the subject *je tegenstander* ‘your opponent’ is the apokoinou or *pivot* element, at first blush reveals the existence of two head-initial functional projections in the left periphery of the clause, consistent with the structure in (18). However, as

further examples in Zwart (2005: 21-23) show, the pivot can also be a time adverbial or a focused constituent, in which case the subject appears twice:

(39) *Apokoinou, nonsubject pivot, Rotterdam Colloquial Dutch*

Ik	heb	nooit	van	mijn	leven	heb	ik
1SG.NOM	AUX:1SG	never	of	POSS:1SG	life	AUX:1SG	1SG.NOM
een	wedstrijd	ge-boks-t	die	ge-maak-t	was		
INDEF.SG	match	GE-fight-PTCP	REL:CG	GE-fix-PTCP	AUX:PAST.SG		

‘Never in my lifetime have I fought a match that was fixed.’

Unlike (35), (39) cannot simply be mapped onto the structure in (18), suggesting that these colloquial phenomena require a different kind of approach.

4.3 *Embedded verb-second*

As mentioned above, and as documented in detail in Vikner (1995, chapter 4), two types of embedded verb-second in Germanic languages must be distinguished:

(40) *Embedded verb-second types in Germanic languages*

- a. Embedded verb-second in all (declarative) embedded clauses
Icelandic, Yiddish

- b. Embedded verb-second in circumscribed (declarative) embedded clauses

Danish, Norwegian, Swedish; Frisian; Dutch, Afrikaans; German

Historically, the Mainland Scandinavian languages were more like Icelandic (Platzack 1988:215), still visible in conservative dialects like Älvdalsmålet (Levander 1909: 133, but see Angantýsson 2017 for an update), and Yiddish was more like German (Santorini 1995:54), so that neither group should necessarily be expected to show uniform behavior (cf. Santorini 1994 on Icelandic vs. Yiddish).

A key difference between the two types of embedded verb-second is that long-distance wh-movement is allowed in the Icelandic/Yiddish type, but not in the Danish etc. type (Vikner 1995:108ff):

(41) *Long-distance extraction in the two types of embedded verb-second clauses*

- a. *Icelandic*

[Hvaða	mynd]	i	sagði	hún
which	film		say:PAST.3SG	3SG.F.NOM

að	börnin	hef-ðu	þegar	séð	<i>t_i</i>	?
COMP	child:INDEF.NOM.PL	AUX-SUBJ.PAST.3PL	already	see:PTCP		

‘Which film did she say that the children had already seen?’

b. *Danish*

[Hvilken film]_i sagde hun

which film say:PAST 3SG.F.NOM

at børn-ene (***hav-de**) allerede (hav-de) set t_i ?

COMP child:PL-DEF AUX-PAST already AUX-PAST see:PTCP

‘Which film did she say that the children had already seen?’

The transparent Icelandic/Yiddish type (40a) shows the nexus of regular complementation constructions, and can simply be mapped as in (18), with the embedded verb occupying the T-position (Holmberg 1988:123, Santorini 1995:56, pace Vikner 1995:138).

The opacity of the embedded verb-second clause in languages of the Danish type (40b) suggests that this is not a regular complementation structure. This is confirmed by the observation that in embedded verb-second clauses in Frisian, unlike regular complement clauses, weak subject pronouns do not cliticize onto the complementizer (De Haan and Weerman 1986:85), and complementizer agreement is absent (22). Analysis of the special character of embedded verb second clauses of this type generally involves positing more structure (‘CP-recursion’ in Vikner 1995:65f; an ‘Illocutionary Act Phrase’ in Woods 2020), but alternatively the crucial factor is not the amount of structure but the absence of the required nexus between the complementizer and the following clause (e.g. Zwart 1997:236). This alternative ties in with the observation in Hooper and Thompson (1973) that embedded clauses with root phenomena contain the main assertion of the

sentence as a whole, reducing the matrix clause to parenthetical status.

For all intents and purposes, then, the embedded clause in (41b) starts a new clause, which may be a CP or a TP, depending on one's analysis of subject-initial main clauses (see above). But nothing compels us to analyse embedded verb-second clauses in languages of the Danish type (40b) as CPs, except when they involve additional subject-verb inversion (which at least in Modern Spoken Afrikaans is exceedingly rare, cf. Biberauer 2002:40).

5. Conclusion

Verb-second refers to a word order pattern where the finite verb appears to the immediate right of the first constituent. In canonical verb-second languages (German, Dutch, Afrikaans, Frisian, Danish, Norwegian, Swedish), verb-second is limited to main clauses, yielding a main-embedded clause asymmetry, though embedded clauses containing the main assertion of the sentence may also display the verb-second phenomenon, sometimes limited to colloquial varieties. In other verb-second languages (Icelandic, Yiddish), verb-second occurs in both main and embedded clauses. In the analysis of the verb-second pattern in generative grammar, the verb-second position is a derived position, obtained by the finite verb via head-movement. In the standard analysis, the derivation involves two ordered steps: 1, verb-movement to the complementizer position C, and 2, XP-movement of an arbitrary constituent to the specifier position of CP. We discussed the validity of this standard analysis from the perspective of Government and Binding theory and Minimalism, arguing that step 1 must be thought of as following step 2, that verb-movement may target various landing sites depending on the construction, and that step 2 as a random XP-movement operation needed to satisfy a 'verb second constraint' can be abandoned altogether. In

this context, views on phrase structure relevant to the syntax of the Germanic languages were also discussed, hinging on the question of whether the standard CP-IP structure of the clause can be applied to Germanic, and if so, whether IP should be head-initial or head-final. More recent developments, assuming a split CP-structure, were also discussed with a view to their relevance to the analysis of the verb-second pattern. Finally, we touched on a range of deviations from the verb-second pattern, including verb-first and verb-third word orders, doubling phenomena (including complementizer agreement), and embedded verb-second, noting that these can generally be described without complicating the structure of the clausal left periphery.

Further Reading

Antomo, Mailin and Sonja Müller, eds. 2018. *Non-canonical verb positioning in main clauses* (Linguistische Berichte Sonderheft 25). Hamburg: Buske Verlag.

Freitag, Constantin. 2021. *Verb-second as a reconstruction phenomenon: evidence from grammar and processing*. Berlin: de Gruyter. (Chapter 2 is a good recent summary of verb-second research.)

Haider, Hubert and Martin Prinzhorn. 1986. *Verb second phenomena in Germanic languages*. Dordrecht: Foris.

Holmberg, Anders. 2015. Verb Second. In Tibor Kiss and Artemis Alexiadou, eds., *Syntax - Theory and Analysis: an international handbook*, Volume 1, 342-383.

Putnam, Michael T. and B. Richard Page, eds., *The Cambridge Handbook of Germanic linguistics*. Cambridge: Cambridge University Press. (In particular chapters 14, by Van Koppen on complementizer agreement, and 16, by Vikner on verb placement.)

Vikner, Sten. 1995. *Verb movement and the licensing of NP-positions in the Germanic languages*. New York: Oxford University Press.

Woods, Rebecca and Sam Wolfe, eds. 2020. *Rethinking Verb Second*. Oxford: Oxford University Press.

Zwart, Jan-Wouter. 1997. *Morphosyntax of verb movement: a minimalist approach to the syntax of Dutch*. Dordrecht: Kluwer.

Zwart, Jan-Wouter. 2005. Verb second as a function of Merge. In Marcel den Dikken and Christina M. Tortora, eds., *The function of function words and functional categories*, 11-40. Amsterdam: John Benjamins.

References

Ackema, Peter and Ad Neeleman. 2004. *Beyond morphology: interface conditions on word formation*. Oxford: Oxford University Press.

van Alem, Astrid. 2022. *Life of Phi: ϕ -features in West Germanic*. Doctoral dissertation, Leiden University.

Angantýsson, Ásgrímur. 2017. Subordinate V2 and verbal morphology in Övdalian. *Working Papers in Scandinavian Syntax* 98, 83-104.

Antomo, Mailin and Sonja Müller, eds. 2018. *Non-canonical verb positioning in main clauses* (Linguistische Berichte Sonderheft 25). Hamburg: Buske Verlag.

Bach, Emmon. 1962. The order of elements in a transformational grammar of German. *Language* 38, 263-269.

Barbiers, Sjef and Marjo van Koppen. 2006. Een plaats voor tijd in het middenveld van het Nederlands. *Taal en Tongval themanummer 19*, 24-39.

Bennis, Hans. 2007. Featuring the subject in Dutch imperatives. In Wim van der Wurff, ed., *Imperative clauses in generative grammar*, 113-134. Amsterdam: John Benjamins.

den Besten, Hans. 1977. On the interaction of root transformations and lexical deletive rules. Ms. MIT, Cambridge and University of Amsterdam. Published in *Groninger Arbeiten zur germanistischen Linguistik* 20 (1981), 1-78.

den Besten, Hans. 1981. Introductory remarks to Den Besten (1977). *Groninger Arbeiten zur germanistischen Linguistik* 20, i-iii.

den Besten, Hans. 1986. Decidability in the syntax of verbs in (not necessarily) West-Germanic languages. *Groninger Arbeiten zur germanistischen Linguistik* 28, 232-256.

den Besten, Hans and Corretje Moed-van Walraven. 1986. The syntax of verbs in Yiddish. Hubert Haider and Martin Prinzhorn, eds., 111-135.

Biberauer, Theresa. 2002. Verb second in Afrikaans: is this a unitary phenomenon? *Stellenbosch Papers in Linguistics* 34, 19-69.

Bierwisch, Manfred. 1963. *Grammatik des deutschen Verbs*. Berlin: Akademie Verlag.

Cardinaletti, Anna. 1990. Subject/object asymmetries in German null-topic constructions and the status of CP. In Joan Mascaró and Marina Nespó, eds., *Grammar in progress: GLOW essays for Henk van Riemsdijk*, 75-84. Dordrecht: Foris.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, Noam. 1982. *Some concepts and consequences of the theory of Government and Binding*. Cambridge: MIT Press.

Chomsky, Noam. 1986. *Barriers*. Cambridge: MIT Press.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz, ed., *Ken Hale: a life in language*, 1-52. Cambridge: MIT Press.

De Vogelaer, Gunther, Magda Devos and Johan Van der Auwera. 2006. Voegwoordvervoeging: morfologisch of syntactisch verschijnsel? *Taal en Tongval themanummer 19*, 212-230.

Evers, Arnold. 1981. Two functional principles for the rule 'Move V'. *Groninger Arbeiten zur germanistischen Linguistik* 19, 96-110.

Fanselow, Gisbert. 2009. Bootstrapping verb movement and the clausal architecture of German (and other languages). In Artemis Alexiadou, Jorge Hankamer, Thomas McFadden, Justin Nüger and Florian Schäfer, eds., *Advances in comparative Germanic syntax*, 85-118. Amsterdam: John Benjamins.

Flikweert, Margriet. 1994. *Wat hoor-ik-te jou zeggen?* Over het verschijnsel van een pronomen

tussen werkwoordsstam en flexie-morfeem, in kindertaal en enkele Nederlandse dialecten. MA-thesis, Utrecht University.

Freitag, Constantin. 2021. *Verb-second as a reconstruction phenomenon: evidence from grammar and processing*. Berlin: de Gruyter.

Freywald, Ulrike. 2013. Uneingeleiteter V1- und V2-Satz. In Jörg Meibauer, Markus Steinbach, and Hans Altmann, eds., *Satztypen des Deutschen*, 317-337. Berlin: de Gruyter.

Fuß, Eric. 2003. Post-syntactic operations: evidence from complementizer agreement. *Linguistic Analysis* 33, 267-302.

Goeman, Ton. 1980. COMP-agreement? In Wim Zonneveld and Fred Weerman, eds., *Linguistics in the Netherlands 1977-1979*, 291-306. Dordrecht: Foris.

Goeman, Ton. 2000. Structurele aspecten van de morfologie van voegwoordvervoeging: mogelijkheden en beperkingen, morfologisch gewicht en MCGG. In Veronique de Tier, Magda Devos, and Jacques van Keymeulen, eds., *Nochtans was scherp van zin: huldealbum Hugo Ryckebroe*, 269-294. Gent: Universiteit Gent.

Grewendorf, Günther. 2010. On the typology of verb second. In Thomas Hanneforth and Gisbert Fanselow, eds., *Language and logos: studies in theoretical and computational linguistics*, 72-96. Berlin: Akademie Verlag.

de Haan, Germen and Fred Weerman. 1986. Finiteness and verb fronting in Frisian. In Hubert Haider and Martin Prinzhorn, eds., 77-110.

Haegeman, Liliane. 1991. On the relevance of clitic placement for the analysis of subject-initial Verb Second in West Flemish. *Groninger Arbeiten zur germanistischen Linguistik* 34, 29-66.

Haegeman, Liliane. 1997. Negative inversion and the structure of CP. Paper presented at the Linguistic Colloquium, University of Wuppertal.

Haegeman, Liliane and Ciro Greco. 2018. West Flemish V3 and the interaction of syntax and discourse. *Journal of Comparative Germanic Linguistics* 21, 1-56.

Haider, Hubert and Martin Prinzhorn. 1986. *Verb second phenomena in Germanic languages*. Dordrecht: Foris.

Heycock, Caroline, Antonella Sorace, Zakaris Svabo Hansen, Frances Wilson and Sten Vikner. 2012. Detecting the late stages of syntactic change: the loss of V-to-T in Faroese. *Language* 88, 558-600.

Hoekstra, Eric and Jan-Wouter Zwart. 1994. De structuur van CP: functionele projecties voor topics en vraagwoorden in het Nederlands. *Spektator* 23, 191-212.

Hoekstra, Jarich and László Marác. 1989. On the position on inflection in West-Germanic. *Working Papers in Scandinavian Syntax* 44, 75-88.

Hoekstra, Teun and René Mulder. 1992. Unergatives as copular verbs: locational and existential predication. *The Linguistic Review* 7, 1-79.

Holmberg, Anders. 2020. On the bottleneck hypothesis of Verb Second in Swedish. In Woods and Wolfe, eds., 40-60.

Holmberg, Anders and Christer Platzack. 1988. On the role of inflection in Scandinavian syntax. *Working Papers in Scandinavian syntax* 42, 25-42.

Hooper, Joan B. and Sandra A. Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4, 465-497.

Jaspers, Dany. 1989. A head position for Dutch clitics, or: Wilma, Wim and Wackernagel. In Dany Jaspers, Wim Klooster, Yvon Putseys and Pieter Seuren, eds., *Sentential complementation and the Lexicon: studies in honour of Wim de Geest*, 241-252. Dordrecht: Foris.

Kayne, Richard S. 1991. Romance clitics, verb movement, and PRO. *Linguistic Inquiry* 22, 647-686.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge: MIT Press.

van Koppen, Marjo. 2020. Complementizer agreement. In Michael T. Putnam and B. Richard Page, eds., *The Cambridge Handbook of Germanic linguistics*, 313-336. Cambridge: Cambridge University Press.

Koster, Jan. 1975. Dutch as an SOV language. *Linguistic Analysis* 1, 111-136.

Lechner, Winfried. 2006. An interpretive effect of head movement. In Mara Frascarelli, ed., *Phases of interpretation*, 45-69. Berlin: Mouton De Gruyter.

Levander, Lars. 1909. *Älvdalsmålet i Dalarna: ordböjning och syntax*. Doctoral dissertation, Uppsala.

Lohstein, Horst and Antonios Tsiknakis, eds. 2020. *Verb Second: grammar internal and grammar external interfaces*. Berlin: De Gruyter Mouton.

Matushansky, Olga. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37, 69-109.

van der Meer, Geart. 1991. The 'conjugation' of subclause introducers: Frisian *-st*. *NOWELE* 17, 63-84.

Meklenborg, Christine. 2020. Adverbial resumptive particles and Verb Second. In Woods and Wolfe, eds., 90-125.

Müller, Gereon and Wolfgang Sternefeld. 1993. Improper movement and unambiguous binding. *Linguistic Inquiry* 24, 461-507.

Nilsen, Øystein. 2002. V2 and Holmberg's Generalization. In Jan-Wouter Zwart and Werner Abraham, eds., *Studies in comparative Germanic syntax: proceedings from the 15th workshop on Comparative Germanic Syntax*, 151-173. Amsterdam: John Benjamins.

Paardekooper, Piet C. 1961. Persoonsvorm en voegwoord. *Nieuwe Taalgids* 54, 296-301.

Platzack, Christer. 1983. Germanic word order and the COMP/INFL parameter. *Working Papers in Scandinavian Syntax* 2.

Platzack, Christer. 1986. The position of the finite verb in Swedish. In Hubert Haider and Martin Prinzhorn, eds., 27-47.

Platzack, Christer. 1988. The emergence of a word order difference in Scandinavian subordinate clauses. *McGill Working Papers in Linguistics: Special issue on Comparative Germanic Syntax*, 215-238.

Poletto, Cecilia. 2000. *The higher functional field: evidence from Northern Italian dialects*. New York: Oxford University Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman, ed., *Elements of grammar*, 281-337. Dordrecht: Kluwer.

Santorini, Beatrice. 1994. Some similarities and differences between Icelandic and Yiddish. In David Lightfoot and Norbert Hornstein, eds., *Verb movement*, 87-106. Cambridge: Cambridge University Press.

Santorini, Beatrice. 1995. Two types of Verb Second in the history of Yiddish. In Adrian Battye and Ian Roberts, eds., *Clause structure and language change*, 53-79. New York: Oxford University Press.

Thiersch, Craig. 1978. *Topics in German syntax*. Doctoral dissertation, Massachusetts Institute of Technology.

Thráinsson, Höskuldur. 1986. V1, V2, V3 in Icelandic. In Hubert Haider and Martin Prinzhorn, eds., 169-194.

Thráinsson, Höskuldur. 2007. *The syntax of Icelandic*. Cambridge: Cambridge University Press.

Travis, Lisa. 1984. *Parameters and effects of word order variation*. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge.

Truckenbrodt, Hubert. 2006. On the semantic motivation of syntactic verb movement to C in

German. *Theoretical Linguistics* 32, 257-306.

Vikner, Sten. 1995. *Verb movement and the licensing of NP-positions in the Germanic languages*. New York: Oxford University Press.

Walkden, George. 2017. Language contact and V3 in Germanic varieties new and old. *Journal of Comparative Germanic Linguistics* 20, 49-81.

Wechsler, Stephen. 1991. Verb second and illocutionary force. In Katherine Leffel and Denis Bouchard, eds., *Views on phrase structure*, 177-191. Dordrecht: Kluwer.

Weerman, Fred. 1989. *The V2 conspiracy*. Dordrecht: Foris.

Westergaard, Marit R. and Øystein Alexander Vangsnes. 2005. *Wh*-questions, V2, and the left periphery of three Norwegian dialect types. *Journal of Comparative Germanic Linguistics* 8, 117-158.

Wiese, Heike. 2009. Grammatical innovation in multiethnic urban Europe: new linguistic practices among adolescents. *Lingua* 119, 782-806.

Wiese, Heike and Hans G. Müller. 2018. The hidden life of V3: an overlooked word order variant on verb-second. In Antomo and Müller, eds., 201-223.

Woods, Rebecca. 2020. A different perspective on embedded V2. In Woods and Wolfe, eds., 297-322.

Woods, Rebecca and Sam Wolfe, eds. 2020. *Rethinking Verb Second*. Oxford: Oxford University Press.

Zagona, Karen. 2013. Tense, aspect, and modality. In Marcel den Dikken, ed., *The Cambridge Handbook of generative syntax*, 746-792. Cambridge: Cambridge University Press.

Zwart, Jan-Wouter. 1991. Clitics in Dutch: evidence for the position of INFL. *Groninger Arbeiten zur germanistischen Linguistik* 33, 71-92.

Zwart, Jan-Wouter. 1993a. *Dutch syntax: a minimalist approach*. Doctoral dissertation, University of Groningen.

Zwart, Jan-Wouter. 1993b. Verb movement and complementizer agreement. *MIT Working Papers in Linguistics* 18, 297-340.

Zwart, Jan-Wouter. 1994. Dutch is head-initial. *The Linguistic Review* 11, 377-406.

Zwart, Jan-Wouter. 1997. *Morphosyntax of verb movement: a minimalist approach to the syntax of Dutch*. Dordrecht: Kluwer.

Zwart, Jan-Wouter. 2005. Verb second as a function of Merge. In Marcel den Dikken and Christina

M. Tortora, eds., *The function of function words and functional categories*, 11-40. Amsterdam: John Benjamins.

Zwart, Jan-Wouter. 2006. Complementizer agreement and dependency marking typology. *Leiden Working Papers in Linguistics* 3.2, 53-72.

Zwart, Jan-Wouter. 2011. *The syntax of Dutch*. Cambridge: Cambridge University Press.