A reappraisal of classical V2 and scrambling in Dutch

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1. Introduction

About 35 years ago, Dutch generative linguists began to realize that the structure of Dutch is substantially different from the structure of English. It is hard to imagine in 2008, but during the first several years of Dutch generative research, the structures familiar from English were taken for granted for Dutch as well. This had much to do with the more semantic orientation of the first Dutch generativists and their preference for Generative Semantics-style analysis, which was less oriented towards fine syntactic detail. The then younger generation grew unhappy about the ever wilder analyses of Generative Semantics and was inspired by the emerging lexicalism (Chomsky 1970) and "conditions on transformations" (Chomsky 1973). Under the influence of Chomsky's students at the time (Emonds, Bresnan and Brame and later Kayne, among others), syntax became more surface-oriented (as it was called then), with more attention for the syntactic differences among languages. This also led to a more positive attitude toward the various structuralists in and around Holland, with special interest in the work of Gunnar Bech, Paardekooper and the school of A.W. de Groot.[1]

This new trend was first picked up by Arnold Evers of Utrecht University, whose work on verb clusters in Dutch and German, circulating in manuscripts since 1969 or 1970, was particularly inspiring at the time (for the most elaborated version and the later rediscovery of Bech 1955-1957, see Evers 1975). Another attempt to do justice to the structure of Dutch was the growing realization that Dutch is, other than English, underlyingly SOV. Under the direct influence of Emonds' (1970) idea of root transformations, a rule of "Verb Second" (V2) was formulated to derive the deviant structure of root clauses from the underlying SOV structure found in most subordinate clauses (Koster 1975). This analysis was further refined by Den Besten (1977). Together with detailed studies about particular projections, like Van Riemsdijk's PP studies (1978), a working consensus arose that became the reference point for most later studies of Dutch.

Due to the enrichment of the set of functional categories (particularly since Chomsky 1986) and since the emergence of minimalism in the 1990s, the consensus gradually collapsed. These developments have been going on now for more than 20 years and, since the

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[1] See, for instance, Bech (1955-1957), De Groot (1965 [1949]) and Paardekooper (1963).

view that this has been a period of continuous progress is far from universally shared, it is time for some evaluative discussion. In this article, I will focus on V2, inspired by the interesting historical sketch given by Zwart (2007) and on scrambling. In contradistinction to Zwart, I will argue that the original consensus version of V2 (going back to the early generative work of Den Besten and Koster) still holds and that subsequent developments have remained unconvincing. In the second part of this article, I will present an account of scrambling and reject theories based on movement to arbitrary functional projections.

2. From early to advanced minimalism

In his review of V2 theories, Zwart (2007) takes an historical perspective and distinguishes the following periods:

(1) a.   the pre-generative period (Paardekooper 1961)
      b.   the early generative period (Den Besten 1977, Koster 1975, Weerman 1989)
      c.   the early minimalist period (Travis 1984, Zwart 1993)
      d.   the present period (Chomsky 2001)

Zwart rightly mentions Paardekooper (1961), who had several insights close to what was pursued during period (1b). Paardekooper's observations were largely unknown to the early generativists and will be further ignored here. It is inevitable that everyone who writes history brings his own biases to the fore and it should be clear that (1) partially reflects a personal view and should by no means be seen as the canonical history of generative research about V2. There is, for instance, quite a bit of skepticism about minimalism in the field, which makes it doubtful that the skeptics agree that they live in "the minimalist period," early, late or otherwise.

In fact, what Zwart calls "the early minimalist period" involved hypotheses that could also be formulated without minimalist ideas, which was in fact what Travis (1984) did. Zwart (1993) modifies Travis' analyses along minimalist lines, but what was perhaps more crucial to the theories of this period was the introduction of CP and particularly IP in pre-minimalist *Barriers* (Chomsky 1986) and the proliferation of functional categories following CP and IP. I am thinking about Tns and AgrS (Pollock 1989), NegP, AgrO and many others.

A periodization like (1) might suggest steady progress, but actually several of the minimalist ideas reflect what I see as the partial decline of generative grammar since the 1970s. In 2008, many more languages are described in ever greater detail and with more or less uniform terminology. In that sense, the field is still making progress and is richer than

ever before. Theoretically, however, many theories presented under the banner of minimalism failed to deliver much new insight and often continued the errors of earlier periods. The main error was the mistaken belief that, next to X-bar theory, there is a need for a secondary computational device called "movement" or "move alpha," in current minimalist theories often rephrased as "internal merge." This is remarkable, as it was clear since the early 1970s that "movement" is a vacuous concept. It followed from structure-preservingness (Emonds 1970) and trace theory (Chomsky 1973) that all syntactic structures could be specified by X-bar theory alone. Furthermore, it was shown that displacement-without-movement did not require any new devices functionally equivalent to movement. This would have made movement-free theories notational variants of movement-based theories. Instead, a good case could be made that all secondary computation (based on the primary structure building of X-bar theory) could be reduced to strictly local property sharing (see Koster 1987 and 2007).

The unmotivated reliance on "movement" thwarted an ideal that should have been obvious, namely the formulation of unified theories of secondary computation. By secondary computation I mean the information exchanges *based* on X-bar structure but not provided by X-bar theory itself, such as what is found in anaphoric relations, agreement relations, control, theta-role and Case assignment, but also filler-gap relations ("movements"). Until the present day, the ideal of uniform secondary computation is frustrated by residual movement theories, as the old movement structures are dealt with by internal merge and copying, while other secondary exchanges are treated by associations of their own kind, like "Agree" (probe-goal relations) and many others.

The role of "move alpha" in the partial decline of generative grammar has even been more damaging in the development of the concept of Logical Form (LF), derived from S-structure by a very peculiar kind of movement, also known as LF-movement or "invisible" movement (see May 1985). Attempts at establishing the reality of LF-movement have systematically failed the test that could have made it interesting, namely that it would meet the same defining island conditions as "normal" movement. Since LF-movement does not meet standard island conditions, it is pointless to account for the phenomena in question by "movement."

One reason why the idea of LF-movement has been damaging is that it undermined the natural explanation for displacement. The very functionality of what was called "movement" is based on its visibility, as was pointed out by Chomsky (1971) and Jackendoff (1972, 384-386). As has been clear for ages, the main function of displacements (morphological reorderings aside) is to vary the information structure of the sentence (in the sense of the

Prague School of the 1920s and 1930s) on the basis of more or less the same lexical material. Wh-movement, for instance, is a form of highlighting. It highlights a constituent to which a requested answer corresponds. It also establishes the type of a sentence (in the sense of Cheng 1991) and indicates the position of the scope-marker for Wh-questions.[2] The scope of a Wh-phrase does not depend on its position (established by movement) but on the universal availability of Wh-scope markers. The many languages with Wh-*in situ* miss the highlighting method of "movement" but usually their Wh-phrases are associated with a Wh-scope marker, just as in the languages that do have Wh-movement. The Wh-scope marker accounts for the scope of the associated Wh-phrases. Fronting of Wh-phrases, in contrast, does not determine scope directly at all, as can also be concluded from the fact that Wh-chains involve intermediate ("successive-cyclic") Wh-movement in most theories with movement.[3]

Highlighting and indicating the position of Wh-scope markers (as an instance of "typing") crucially depend on the *visibility* of displacement ("movement"). Invisible movement (LF-movement) does not make sense from this point of view and must be rejected as a superfluous operation, which does not serve any function whatsoever. By having invisible movement next to visible movement, it could no longer be said that movement generally has functions like highlighting or varying "aboutness" patterns, which are crucially based on visibility. Instead of maintaining the perfectly sensible earlier ideas about the rationale behind displacement, new kinds of motivations for movement were developed, such as "feature checking," supposed to function as a form of "triggering." The features in question were furthermore, entirely arbitrarily, divided in "weak" and "strong" versions, where "strong" leads to overt movement and "weak" to covert, postponed movement ("procrastinate"). Failure to eliminate uninterpretable features (by checking via movement) would lead to the "crashing" of the derivation at the conceptual-intentional interface.

It was hard to see any empirical content to the development of linguistic theory along these lines. Not only "movement" itself, but also whether it happened to be visible or invisible in some language, became entirely based on accidental stipulations about features being "weak" or "strong." Theories based on feature checking tend to be non-explanatory and circular, unless the features have some external interpretation. The distinction between "weak" and "strong" features did not have any empirical content at all in this sense. Similarly, the notion of "crashing derivations" is untestable. There is not the slightest reason to expect

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[2] See Koster (2003) for discussion and some complications. See also Lutz et al. (2000)
[3] Of great relevance in this respect is the phenomenon of partial Wh-movement: see Van Riemsdijk (1982), McDaniel (1989) and Schippers (2008).

that interfaces cannot handle features that are not "legible" with respect to these interfaces, for instance by just skipping them. Since the relation between syntactic wellformedness and semantic interpretability is weak ("colorless green ideas sleep furiously"), we may expect that the conceptual interface just ignores uninterpretable features rather than causing a "crash." As in the case of "weak" and "strong" features, the notion of a "crash" caused by uninterpretable features has no empirical content.

All in all, I think, there are plenty of reasons to be skeptical about what Zwart (2007) calls "the early minimalist" period. In many ways, it just continued the errors of the earlier Government-Binding period (Chomsky 1981), now partially rephrased in fancy and mostly unsubstantiated feature choreography.

What Zwart calls "the present period," a more developed minimalism, has shown further theoretical decline in certain respects (naturally, not in all respects). The central error of current minimalism is the idea that sentences are generated by Merge and the related error that X-bar theory has been overcome somehow. Nobody believes that sentences are generated by Merge alone. In order to make things manageable, Merge is usually supposed to work on the basis of a numeration. Thus, in order to generate a sentence like *John likes Mary,* Merge is supposed to work with a numeration that minimally contains *John, like(s)* and *Mary*. This is an arbitrary decision, as there is no empirical evidence whatsoever for the empirical reality of numerations. Even with relatively modest numerations of, say, 10 words, Merge can generate 10^{10} (= 10 billion) strings of 10 words. Most of that is gibberish, so, the question is how to define the very limited class of grammatical strings among the 10 billion strings generated. In theory, minimalism refers to the interfaces in this case, the sensorimotor interface (SM) and the conceptual-intentional interface (CI), plus to largely unknown "third factor principles." In practice, however, nobody ever works this out in detail, because it is an illusion that the interfaces can come to the rescue.

Suppose the numeration contains the name *Maria*. Merge can then generate the following 10-word string:

(2)   [Maria [Maria [Maria [Maria [Maria [Maria [Maria [Maria [Maria Maria]]]]]]]]]

This string can easily be pronounced, so, there is no reason to let the phonological component filter it out. Similarly, there is no reason to have this string rejected by our conceptual-intentional faculties. It can, for instance, be seen as the mantra (or the text for a musical) of a person in love who repeats the beloved name ten times.

In general, as in the case of alleged "crashing," there is never any reason to expect our conceptual-intentional interface to reject any string of words whatsoever. Confronted with a string of words, our interpretive faculties try to make the best of it. Whether somebody succeeds in that or not is something way beyond the scope of linguistic theory.

What all of this comes down to is that "grammaticality" cannot be reduced to the combined working of Merge and the interfaces. This limited relevance of the interfaces for grammaticality has been a guiding principle of generative grammar since the 1950s, a principle known as the autonomy of syntax. Our language consists of words of arbitrary shape (Saussure) and they have among their properties a set of normative environments. The template structures of words have been used to characterize grammaticality by (versions of) X-bar theory since Chomsky (1970). X-bar theory cannot be reduced to the properties of the interfaces and giving it up is only justified if an alternative method is proposed to define the grammatical subset among the 10 billion strings possible on the basis of Merge and a numeration of, say, 10 words.

In practice, this formidable challenge is never met, with the result that nearly all working linguists still use a version of X-bar theory, excused by the fact that minimalism is a program, not a theory. This is certainly true for those who, following Chomsky, claim that a sentence is a CP consisting of TP, vP and VP. If these substructures are not projections in the sense of some X-bar theory, what are they?

This brings me to the core background notions for a fruitful discussion of the nature of V2 in languages like German and Dutch. Theories about V2 crucially depend on what is seen as the nature of the sentence in relation to the projections of V. In this respect, the period covered by (1c) above shows a very chaotic picture. Since the appearance of *Barriers* (1986), S' and S were replaced almost overnight by CP and IP by most MIT-oriented generative linguists. The array of functional projections was soon expanded with AgrSP, TnsP, NegP, AgrOP, etc. (see for instance Pollock 1989). Several years later, many of these functional projections disappeared with the same breath-taking speed as they had emerged, leading to the current standard opinion that a CP consists of TP, vP and VP.

Especially when such changes take place overnight, without the normal critical skepticism with which new ideas should be evaluated, it is more appropriate to speak of fashions than of genuine theoretical developments. In many such cases, the field forsakes its theoretical and explanatory ideals by becoming a kind of descriptive technology. The name of the game, then, is to describe observed facts in terms of the categories of the day.

Unlike Zwart, I think the reality of IP (TP, AgrSP) and vP has insufficiently been justified for Dutch. Consequently, I am more skeptical about the theories of V2 developed in the minimalist period. Or to put it stronger, I still believe that the early generative theory formulated by Den Besten (1977) and Koster (1975) is correct.[4]

3. The classical analysis of V2

It seems to me that the new theory about V2 proposed by Zwart (1993) is neither based on sound conceptual considerations nor on convincing empirical evidence. As a matter of fact, I see it as an attempt to adapt the structure of Dutch to the idea introduced by *Barriers* that the category S is in fact a projection of I(nfl) known as IP. In English, there is some initial evidence for a category I between complementizer and VP, as English has auxiliaries outside of the VP and occasional expression of agreement features by *do*-support. In Dutch, however, auxiliary verbs behave very much like ordinary verbs and are not found outside of the core VP (apart from V2). Nor does Dutch have an equivalent of *do*-support. So, if there is any evidence for the category I in Dutch at all, it must be more indirect.

But let me first recall the formulation of V2 as found in Koster (1975, 128) and cited by Zwart (2007):

(3)   COMP [$_S$ X ... X V] => COMP [$_S$ V X ... X]

Note that COMP in theories of those days did not stand for the complementizer, but for the first position of the clause, which could be filled by Wh-phrases and, by extension, by topics and any other category XP. Maybe this would be called an edge position nowadays and it differed from the positions within S in that it could be filled by *any* XP coming from within S. In fact, COMP was within S', so that the full derived structure in (3) was conceived of as in (4):

(4)   [$_{S'}$ COMP [$_S$ V X ... X]]

This corresponds to what was stated in later versions as:

(5)   [$_{CP}$ Spec [$_{C'}$ V X ... X]]

This revision was in part a matter of giving the same structure as in (4), but with new labels derived from the later ideas about X bar-structure. A crucial improvement to (4) (or (5)) was

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[4] It should be noted that the classical analysis was somewhat modified and refined after Chomsky (1977). See Koster (1978) and the discussion about topicalization later on in this article.

proposed by Den Besten (1977), motivated by the ambition to replace as many arbitrary root transformations as possible by structure-preserving rules (in the sense of Emonds 1970). Den Besten realized that both the complementizer C and the V of a sentence can be used to lexicalize the category Tense. So, the landing site of V in root clauses (V2) in (5) was identified as being exactly the same position as the C of subordinate clauses, where C and V were seen as alternative realizations of Tense in the second position of the sentence. Otherwise, Den Besten continued to follow the analysis of Koster (1975), namely that COMP in (4) (i.e., Spec in (5)) can be the landing site for any category XP from below, *including the subject of the sentence*.

Note that these theories were pre-minimalist and therefore entirely formulated without reference to notions like feature checking or the "triggering" of movement. The first position (COMP in (4)) is obligatorily filled by any XP of the sentence to give it a topic or a stage setting expression.[5] In a strict V2 language like Dutch, the occupation of the first position, even by categories other than the subject, leads to much more neutral intonations than what we see in the structures of English with so-called "topicalization." Choosing the subject as one of the options to fill the first position seemed to fit in well with the unmarked character of many Dutch realizations of the first position (for instance in the case of sentential adverbials).

All of this means that Zwart's question "what is the trigger?" for the filling of COMP in (4) does not make sense in the framework in which it was formulated. Dutch is a language in which the first position of root clauses is not reserved for the subject but for any XP. In a significant sense, English is much more a subject-first language, in which sentence onset by non-subjects leads to a more marked word order.

The second position, V2 in root clauses and C in subordinate clauses, does not depend on arbitrary feature checking or triggering either. Both V2 and C fulfill (next to other functions) the same role, namely that they realize the Tense operator that has scope over the whole sentence (cf. Evers 1982 and Koeneman 2000). This is a function closely akin to the role of the scope marker for Wh-phrases, which occupies a similar high position in the sentence. In fact it is the same position with Dutch *of* ("if," " whether"), which is both a question marker and a tense marker in (6):

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[5] It is well-known that if the first position is phonologically silent, the sentence is interpreted as a question. This suggests a question operator as a possible realization of XP.

(6)   Ik wil weten   wat   of jij gezien hebt
        I want to know what if you seen have
        "I want to know what you saw"

As in all cases of structure-preservingness, the verb in second position can be "base-generated" as the natural position where the tense operator is realized with its scope over the whole sentence. Talk about V2 as a movement transformation is completely beside the point, as I have been assuming since Koster (1978). V2 as some operation triggered for reasons of feature checking is even more meaningless from this point of view.

In order to illustrate my objections against later analyses, it should be noted that the Koster/Den Besten analysis is optimally simple in two ways: it can do with only one V position in root clauses and only one way to represent the order subject-finite verb in root clauses. Later analyses, gave up this elementary elegance without yielding any new insight.

4. V2 in early minimalism

The analysis of V2 given in Zwart (1993) is the major analysis of the phenomenon in "early minimalism" and, as such, it has been inspiring and influential. It can be characterized as an attempt to find a place for IP (and I) in the structure of Dutch. In the more recent versions of minimalist analysis, this IP is seen as TP (see, for instance, Barbiers en Van Koppen 2006). The essence of the analysis goes back to Travis (1984) and asserts that Dutch, like English, has a projecting I in the middle field, between VP and C.[6] This I is seen as a possible landing site for V2. The obvious question why this position is never lexicalized, either by V-movement or otherwise, is countered by the assumption that the features of I (AgrS in Zwart 1993) are moved to C, which has somehow priority over V-movement. In root clauses, however, this feature hosting C is absent, which makes movement of V to I necessary. In sentences beginning with subjects, the verb is not in the position of C (as in the classical analysis) but in the position of I, while the subject is not in Spec, CP but in Spec, IP (or Spec, AgrSP).

Whereas the Koster/Den Besten analysis has only one position for all V2 phenomena, namely the same position as C in subordinate clauses, the alternative analysis has more than one V2-position. In subject-initial sentences, it is in I-position, and in sentences beginning with Wh-phrases it moves up to the head position of a phrase above IP and with topics it moves up to the even higher head position of the Topic Phrase. In the various versions of this

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[6] The middle field is the tradional German notion of *Mittelfeld* and, as I take it, is the part of the sentence between C and final V.

theory, V2 in minimally realizable in both I-position and C-position. This "flexibility" of the V2 position is seen as a virtue of the new theory, as opposed to the rigid "cartography" of the Koster/Den Besten theory.

Note that the new theory not only has more than one V2 position, it also has more than one way to realize the order subject-finite verb: it can either be subject as Spec, IP with V2 in I or, as in the classical analysis, subject as Spec, CP with V2 in C. None of this makes sense to me, as the wish to incorporate IP in the structure of Dutch comes here at the cost of a loss of overall elegance and simplicity. So far, the new analysis can therefore be seen as an argument against IP (or TP) in Dutch, in accordance with skeptical views as for instance expressed quite early by Weerman (1989).

Worse, the multiplication of V2 positions entails a denial of what the V2 position was seen to be about in the first place, namely as a way to express scope marking for Tense. Although multiple scope marking, as in the case of partial Wh-movement, does occur in languages, there seems to be no justification for it in Dutch. In fact, the multiplication of V2 positions is not presented along the lines of partial Wh-movement at all but as something brought about by the arbitrary feature checking and triggering mechanisms of minimalism.

In retrospect, the various attempts to incorporate IP (or TP) into the structure of Dutch or German have produced practically no insight whatsoever but rather indicated that these languages lack such a category. Initially, it was thought that in SOV languages like German and Dutch, the head of IP is situated in sentence final position, to the right of the VP. However, it was soon realized that there is no evidence for an I to the right of the VP and for the required V-movement to the right (see Reuland 1990 and Zwart 1993 for discussion). Zwart's adoption of the Travis hypothesis (head of IP to the left of VP) at least had the virtue that it initiated much research into the phenomenon of complementizer-subject agreement. In many dialects of Germanic, including Dutch dialects, the complementizer *dat* ("that") can agree in person and number with the following subject (as was observed since Van Haeringen 1938; see also Goeman 1980) (example from an East Netherlandic dialect, given in Zwart 1993, 161):

(7)   …datte   wij speult
        that-1Pl we play

The normal form of the complementizer is *dat* ("that"), but as shown in the example, the suffix *-e* can be added to express agreement with the following subject (first person plural). Note that there is a second agreement here, this time expressed on the verb as *-t*.

One of the many important hypotheses of Zwart (1993) is that the fact that the agreement on the verb can be expressed in two ways depends on where the finite verb shows up: one form for the verb (*speule*) in C (as in (8b)), and one form for all other positions (*speult* as in (8a)) (see Zwart 1993, 174):

(8)   a.   Wij *speul-e/ speul-t
               we play-1Pl/play-1PL
               "We are playing"

        b.   Speul-e/*Speult   wij?
               play-1PL/play-1Pl we
               "Are we playing?"

According to Zwart's interpretation of these facts, the suffix *-e* indicates that the verb is in C position, as it is shown by both the complementizer *datte* (= dat-e) (obviously a C) and the V in questions, where the verb arguably has undergone I-to-C movement (8b). A crucial assumption here is that the shape of the verb is a diagnostic for its being in C: the verb ends in *-e* if and only if it is in C. This entails that *speult* in (8a) is not in C (as was assumed by Koster and den Besten), but in I (AgrS in Zwart 1993). This is the strongest argument I know against the classical analysis and it was adopted by several other minimalists, like Barbiers and Van Koppen (2006).

Nevertheless, the argument is far from convincing because the crucial assumption (morphology as a diagnostic for V in C) is not necessarily true. There is an obvious alternative to Zwart's analysis of (7) and (8), namely the hypothesis that the phonological realization of the plural morpheme depends on whether the verb (and the complementizer) is to the left or the right of the subject:

(9)   a.   1Pl = *-t* / subject... –
        b.   1Pl = *-e* / – ...subject

Under this alternative hypothesis, the form of the verb says nothing about whether it is in C or not, so that *Wij speul-t* (in (8a)) is compatible with the classical analysis with its assumption that V2 is always taking the position of C.

So, which interpretation of the facts in (7) and (8) is correct? In order to give a tentative answer to this question, we have to consider a further crucial assumption of Zwart (1993, 175):

(10)   Complementizer agreement is a morphological reflex of AgrS-to-C movement

This is the essence of Zwart's explanation for the fact that V does not move to I in embedded clauses, which would cause unattested V2 in embedded Dutch clauses. The idea is that some version of the principle of *Greed* gives priority to feature movement (from AgrS to C) over movement from V to AgrS. These assumptions are embedded in the usual minimalistic framework of feature choreography ("checking" and "triggering" etc.) for the sake of crash prevention at the interfaces. As discussed above, I reject such notions on independent grounds.

But apart from the usual problems facing the minimalistic assumptions in question, the explanation based on (10) seems *ad hoc* and even contradicted by the facts. It is *ad hoc* because the same features of AgrS (and *Greed*) do not prevent other languages to lexicalize them by an auxiliary verb (as in English) or even by embedded V2.

More interesting is the fact that (10) also leads to empirical problems. It is not immediately clear what is meant by a "reflex" in (10), but if the agreement morphology on the complementizer has its origin in AgrS (as entailed by (10)) one might expect that if AgrS-to-C movement is not necessary for some reason, realization of the agreement is the same as what we find on C after AgrS-to-C movement. This prediction is not borne out, as can be seen in (8) (repeated here for convenience):

(8) a. Wij *speul-e/ speul-t
          we play-1Pl/play-1PL
          "We are playing"

     b. Speul-e/*Speult   wij?
          play-1PL/play-1Pl we
          "Are we playing?"

The relevant fact is *Wij speul-t* in (8a). According to Zwart's analysis, the features of AgrS are not moved to C here because there is no C. In that case, V-movement takes place, leading to V2 in AgrS, with the subject as Spec, IP instead of Spec, CP (as in the classical analysis). However, the agreement morpheme on C is *-e* (*speul-e*). So, one would expect that if the AgrS features stay where they are, they show up in their C-form, e.i., as *-e* and not as *-t.* As a matter of fact, however, we see *-t (Wij speul-t)* rather than the predicted C-form *-e* (**Wij speul-e*). The C form is predicted because it is supposed to have its origin in AgrS.

The alternative hypothesis (9) faces none of these problems. I conclude therefore that, other things being equal, it is correct and that there is no argument for AgrS in Dutch on the basis of complementizer and verb morphology. AgrS-to-C movement remains an *ad hoc*

hypothesis and a complicated way to state the obvious, namely that the roles of AgrS in English are largely fulfilled by C in Dutch.

The other arguments for an I (AgrS or Tns) on the Dutch middle field are much weaker and will be discussed next. One popular argument is based on the distribution of weak pronouns and is discussed by Barbiers and Van Koppen (2006). They claim that weak object pronouns cannot occur sentence-initially, whereas weak subject pronouns can, which they base on the further assumption that Spec, CP can only host focused constituents:

(11) a. Jij   / je   kunt best gelijk hebben
          youSTRONG / youWEAK   can well right have
          "You can very well be right"

      b. Jou   / *je   heb ik gezien
          youSTRONG / youWEAK have I   seen
          "You, I have seen"

      c. Jou   /*je   heb ik een boek gegeven
          youSTRONG / youWEAK have I a   book   given
          "I have given a book to you"

      d. Daaraan   /* eraan   denkt hij niet
          thereofSTRONG / thereofWEAK thinks he not
          "He did not think thereof"

This analysis goes back to Travis (1984, 119) and shows insufficient appreciation of what is possible in sentence-initial position in Dutch or German. Both premises are false: weak non-subject pronouns *do* occur sentence-initially in Dutch and German and it is simply false that Spec, CP can only host focused constituents. A constituent in Spec, CP is only in focus under certain pragmatic conditions, for instance if the word order deviates from the unmarked standard word order in the middle field. Thus, *het boek* ("the book") in (12a) is in focus because there is no corresponding unmarked middle field order (12b):

(12) a. *Het boek* heeft Jan niet gelezen
          the book has   John not read
          "The book, John didn't read"

      b. *Ik denk dat *het boek* Jan   niet heeft gelezen"
           I   think that the book John not has   read

All ungrammatical examples in (11) show deviations from the unmarked middle field word order, which puts the preposed weak pronouns illegitimately into focus. However, when for

some reason a weak *non-subject* pronoun can occur neutrally at the beginning of the middle field , it can often also appear sentence-initially in Spec, CP. Several German linguists have pointed out that the German weak pronoun *es*, as a non-subject, can easily appear at sentence-initial position and that therefore Travis' original conclusion is too simplistic. Frey (2006) gives several examples and references to previous accounts. In (13a), preposed *es* is an object and in (13b) (from the Schwabian dialect) the preposed object can even be reduced to *'s*:[7]

(13)   a.   Es hat der Maria   leider   jemand ausgeliehen
                it   has DEF Mary$_{DAT}$ unfortunately someone loaned
                "Unfortunately, someone loaned it to Maria"

        b.   (E)s hat 'r zum Glück gar net gmerkt.
                  it   has he luckily   at all not noticed
                "Luckily, he has not noted it"

No matter what the exact contexts, such examples clearly show that Travis' original generalization is false and that weak object pronouns do appear in fronted position. Since the classical analysis was supposed to hold also for German, this seriously undermines the argument based on weak pronouns.

The Dutch counterpart of *es*, the weak pronoun *het*, cannot be fronted as in German, presumably because it cannot be fronted at the middle field either (as it can in German). However, also in Dutch, a sentence can begin with a weak pronominal form. Consider the following example:

(14)   Er   schrijft iemand   iets   -- over
        There writes   someone something about
        "Someone writes something about it"

Er is interpreted as the complement of *over*, as indicated by --, which makes *er* a non-subject. Nevertheless, it is not focused in (14). However, once could argue that *er* is not the real object of *over*, because there might be a hidden second object that is deleted if *er* occurs twice (see Bennis 1986) (*daar* is the strong counterpart of weak *er*):

(15)   a.   Er schrijft iemand *daar*   iets -- over

        b.   Er schrijft iemand (*er*) iets -- over

This would make the first *er* an expletive rather than the object of *over* (the object function being fulfilled by the second, deleted *er*). However, even if *er* is an expletive, it is not the

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[7] Both examples from Frey (2006).

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subject. The subject is *iemand*, as shown by its agreement with the verb. Unlike *iemand*, *er* has no φ-features and cannot check the features of AgrS in its Spec (I am following the minimalist logic here for the sake of argument).[8] This means that *er* in (14) remains just another case of a non-subject weak pronoun in sentence-initial position.[9]

There are several other examples that show that a non-subject in sentence-initial position is not necessarily in focus. Adverbials like *waarschijnlijk* ("probably"), for instance, can start a sentence with completely neutral, non-focus intonation:

(16)   Waarschijnlijk heeft hij het boek gekocht
        probably   has   he the book bought
        "Probably, he bought the book"

Assuming that *waarschijnlijk* is not in the Spec of AgrS, this is another counterexample to the claim that Spec, CP can only host focused constituents.

In fact, I used adverbial order in Koster (1978, 205ff.) to show that the canonical middle field orders can only be changed by fronting if the fronting involves Wh-movement in the sense of Chomsky (1977). It has been largely ignored in minimalist revisions of V2 theories (also by Zwart 2007) that the classical analysis was refined after Chomsky (1977). Originally, there was only one position to consider at the front of the sentence, namely the equivalent of what is now called Spec, CP. However, even before Chomsky (1977) it was observed that sentence-initial constituents are often followed by an optional d-word (cf. Koster 1978, 200):

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[8] It has sometimes been claimed that in constuctions with *there* (or *er*) the φ-features are transferred from the real argument to the expletive, for instance in cases like *There arrives a man*. However, I see no reason for such an *ad hoc* step as long as there is a perfectly straightforward alternatve: the verb agrees with the internal argument if there is no external argument.

[9] There are numerous other examples with weak non-subject pronouns in first position, usually when the neutral middle field order is not changed. Hans den Besten gives the following examples (personal communication):

(i)   Me lijkt   dat we maar eens moeten gaan
        Me seems that we   by now   must   go
        "It seems to me that it is time to go"
(ii)   Me is duidelijk geworden dat ...
        Me has clear   become   that
        "It has become clear to me that..."

Den Besten further points out that much also depends on prosody. Thus, stressed postpositions (like *naast* ("next to")) allow a weak pronoun in first position (cf. iiib with an unstressed postposition):

(iii)   a.   Ernaast   stond een stoel
                Next to it stood a   chair
        b.   *Ermee heeft hij het gedaan
                With it has   he it   done

Altogether, such examples show that weak non-subject pronouns do occur in first position when the right conditions are met.

(17) a.   Die man (die) ken ik
            that man that know I
            "That man, I know"

      b.   Die jongen (die) is gek
            that boy   that is crazy
            "That boy is crazy"

      c.   Knap (dat) was ze   zeker
            clever that was she certainly
            "Clever, she certainly was"

      d.   In Den Haag, (daar) woont een graaf
            in The Hague there lives   a count
            "A count lives in The Hague"

Naturally, it was assumed that in such cases, the d-word was the thing actually moved to Spec,CP (under Wh-movement), while the topics moved one place up. Spec, CP could still be filled by any XP other than those expressed by d-words or an empty operator, but only if that did not change the canonical middle field order. The latter could only be changed by Wh-movement (of the optional d-word or a silent version of the operator). So, topicalization of the object necessarily involved an operator position (18a), while subjects had the choice between operator-mediated fronting (like objects, cf. (17b)) and direct movement to Spec, CP (18b):

(18) a.   die man [$_{CP}$ (die$_i$) [[$_C$ ken]   ik t$_i$]]
            that man   that   know   I
      b.   [$_{CP}$ die jongen$_i$ [[$_C$ is] t$_i$ gek]]
              that boy   is   crazy

A structure like (18b) was thought to be not possible for objects, because reorderings of the middle field order were only possible with Wh-movement (operator movement). Subject movement (as in (18b)) does not involve reordering of the middle field order and can therefore do without mediation by an operator (as in (18a)).

This made the interesting prediction that elements that can independently be shown to be incompatible with Wh-movement cannot be fronted if that involves change of the middle field order. An adverb like *waarschijnlijk* ("probably") is an interesting case. It has no corresponding d-word and there is indpendent evidence that it cannot undergo Wh-movement, as it cannot undergo extraction from an embedded clause (Koster 1978, 207);

(19)   a.   Jan zegt dat hij waarschijnlijk ziek is
               John says that he probably sick is
               "John says he is probably sick"

       b.   Waarschijnlijk zegt Jan   dat hij ziek is
               Probably   says John that he sick is
               "Probably, John says that he is sick"

Sentence (19) is grammatical but not as a variant of (19a) but only under the interpretation in which *waarschijnlijk* is construed with the matrix clause. This indicates that, unlike some other adverbs, *waarschijnlijk* does not seem to involve (seemingly unbounded) Wh-movement. But since Wh-movement is necessary for fronting with change of the middle field order, we predict that *waarschijnlijk* cannot be fronted across an adverb that is higher in the Cinque hierarchy. This prediction is borne out . First, however, some examples that illustrate the middle field order:

(20)   a.   Hij is helaas   waarschijnlijk ziek
               he is unfortunately probably   sick
               "Unfortunately, he is probably sick"

       b.   ??Hij is waarschijnlijk helaas   ziek
                he is probably unfortunately sick

The Cinque order for the adverbs here is *helaas>waarschijnlijk*. Normally, a canonical middle field order can be overruled by topicalization, for instance when an objects is fronted across a subject (as in (17a)). However, if mediation by Wh-movement is a necessary condition for such reorderings, we predict that *waarschijnlijk* (as an adverb incompatible with Wh-movement) cannot me moved across the higher adverb *helaas*, even with topicalization:

(21)   a.   Helaas is hij waarschijnlijk ziek
               unfortunately is he probably sick

       b.   ??Waarschijnlijk is hij helaas   ziek
                probably   is hij unfortunately sick

What these facts show is that movement to the front of the sentence is not directly dependent on focus, but on the compatibility of the fronted element with Wh-movement. If Wh-movement is not available, fronting is still possible but only if the middle field order is not changed (as in (21a)).

       These restrictions on reordering are the key to understanding why weak pronouns can only be fronted without reordering (i.e., subjects can be fronted but objects cannot): unlike

strong pronouns, weak pronouns are not compatible with Wh-movement (Koster 209 ff., particularly p. 212, for examples and discussion).

All in all, there is plenty of evidence that the restrictions on fronting have nothing to do with any difference made by movement to Spec,IP or Spec, CP. The determining factors are deviance from (or compliance with) the middle field order and availability of Wh-movement. Travis' original observation appears to have been based on too limited a set of data. It is just false to say that Spec, CP is only a host position for focused elements and that unfocused subjects must therefore be in Spec, TP or Spec, AgrSP.

Barbiers and Van Koppen derive a last, rather far-fetched argument from what they call "subject intrusion," mostly observed in Dutch child language (original observations in Goeman 1980 and Flikweert 1994):

(22)   Dan noem-ik-te jou Sinterklaas   (Jitske; 4,5)
         then call-I-PAST you Saint Nicholas
         "Then I called you Saint Nicholas"

What is peculiar here is that the pronominal subject *ik* seems to be incorporated in the past tense form of the verb (*noem-ik-te* instead of *noemde ik*). With much imagination, they see in this example an argument for a head T on the middle field of Dutch (the equivalent of I or Zwart's AgrS). The proposed analysis for (22) looks as follows:

(23)   [CP dan [C noem [TP ik [T ~~noem~~-te [VP jou Sinterklaas [V ~~noem~~]]]]]]
              then   call   I   -PAST   you St Nicholas

What they propose is that the verb (*noem*) moves to C when there is no complementizer and that V-movement to C passes through T, where the past tense suffix (*-te*) is stranded. The stranded suffix, then, is seen as evidence for a category T in the Dutch middle field. Since careful comparisons with obvious alternative analyses are not even considered, the proposed analysis lacks initial plausibility. The most obvious alternative would be to consider *noem-ik-te* an exceptional word, with the pronominal subject *ik* incorporated into the verb form. That alternative would avoid the stranding of inflectional morphemes, which otherwise never occurs Dutch and its dialects. Giving up the islandhood of words with respect to inflectional morphemes is too high a price to pay and extremely *ad hoc*. Such very unlikely assumptions would require extremely strong evidence. None whatsoever is given.

In fact, in order to let (23) work, further *ad hoc* hypotheses must be added. With preposition stranding, for instance, the preposition is stranded in the rightmost occurrence of a

PP. In (23), however, stranding of the past tense suffix -te is completely impossible at the rightmost position of the verb, in spite of the fact that the verb always occurs here *with* its suffix. In order to let the final verb pick up the past tense suffix –*te*, Barbiers and Van Koppen first move the verb to T and subsequently, following Hallman (2001), move the entire remnant of the VP to the left, in order to restore the final position of the verb. Such remnant movements are completely arbitrary and another very high price to pay for an idea that is *ad hoc* to begin with.

In Dutch dialects, there are very exceptional cases of subject intrusion. Barbiers and Van Koppen give the following example from a South-Hollandic dialect:

(24)   Toen wandel-die-de door   het park
       then walk-he-PAST through the park
       "The he walked through the park"

Again, the simplest analysis for this very exceptional case is to incorporate the subject *die* into the verb form, not as a matter of grammatical rule but as a matter of exceptional stipulation, something typically listed in the lexicon. As a general rule, derivation on the basis of (23) would systematically make false predictions, for instance with subjects other than *die*:

(25)   *Tone wandel-*Jan*-de   door   het park
        then walk-John-PAST through the park

Another false prediction of (23) comes from the fact that in spite of the V2 character of Dutch, there are numerous adverbial expressions and parentheticals that can occur between the subject and the finite verb believed to be in T (according to (23)):

(26)   a.   Jan, *immers*, wandelde door   het park
             John, after all, walked through the park

       b.   Jan, echter,   wandelde door   het park
             John, *however*, walked throught the park

       c.   Jan, denk ik, wandelde door   het park
             John, *think I*, walked   through the park
             "John, I think, walked throught the park"

It is impossible in the dialects in question, I assume, to strand de past tense suffix in the T position with such expressions:

(27) a.   *Toen wandel-die-*immers*-de door het park

      b.   *Toen wandel-die-*echter*-de door het park

      c.   *Toen wandel-die-*denk ik*-de door het park

Summarizing, it seems to me, there is no evidence for stranded past tense suffixes in a position T in Dutch dialects. More generally, as we also saw before, there is no good evidence in Dutch so far for any verb position whatsoever (be it I, AgrS or T) between C and V. The classical analysis stands unchallenged, it seems.

5. Purging the middle field

So far, we have seen that theories about V2 got led astray by enrichments of the Dutch middle field (between C and V) that happened to be unmotivated in the long run. I am particularly thinking about the head of IP and its variants and extensions (I, T, AgrS, *v*), but also in relation to objects, various functional projections were proposed. The most important of those is the AgrOP and its variants, like the accusative phrase (AccP) and dative phrase (DatP) in Koster (1999). This further proliferation of functional categories led to some new insights but also contributed once more to the relative theoretical decline of generative grammar.

Recall that I attributed said decline to (a) the unmotivated survival of movement rules or schemes after the 1970s and (b) the even further extension of the idea of "movement" to situations in which there was no external motivation for displacement (in terms of information structure or highlighting). As we discussed above, this development was initially centered around the invisible movement known as LF movement. But things got really arbitrary under minimalism, in which the external motivation of movement was often replaced the feature-driven choreography mentioned before. What I mean is the idea that movement is not externally motivated but "triggered" to check or eliminate features to prevent "crashes" at the interfaces.

These often circular motivations for movement were bad enough, things got considerably worse by two factors. First of all, there was the said proliferation of functional projections. Second, there was the effect of certain aspects of Kayne's LCA (1994). The many new projections created equally many new landing and "checking" sites for movement, while the idea of external motivation for displacement was practically given up. So, the explosion of functional categories in combination with arbitrary, feature-driven movements led to a descriptive technology so rich that the ideal of explanatory adequacy practically went out of sight.

So, what did Kayne's LCA (1994) contribute to the increase of arbitrary structure? The LCA had three consequences: (a) the prediction that there is only movement to the left, (b) the belief that there are more headed projections than meet the eye (to guarantee antisymmetry), and (c) the idea that all languages are head-initial. The first idea (a) was productive because it led to closer scrutiny of so-called rightward movements (like extraposition) and eventually contributed to the disappearance of those (see Kaan 1992, Koster 2000 and De Vries 2002). The second consequence (b) led to the extension of the class of functional projections and therefore contributed to a trend that already had shown its dubious effects. The third consequence, that all languages are head-initial, is certainly very interesting and initiated a lot of engaging research. It led, for instance, to an exploration of the idea that Dutch and German are underlyingly SVO instead of SOV (as had been assumed since the early 1970s) (see Zwart 1993 and Koster 1994).

In spite of these virtues, the LCA (particularly its consequence (c)) remained a long shot. In the long run, the idea of universal head-initial structure ceased to inspire, because it requires massive restructuring, i.e., even more arbitrary movements than the field was already suffering under. As it stands, it seems to me that there is not a single convincing empirical argument to derive the OV structure of Dutch from an underlying VO pattern. I will elaborate a bit on this in a moment.

All in all, I think it is time for a radical purge of the field of everything that contributed to the exponential growth of arbitrary, not externally motivated movements. This purge will heavily restrict the number of functional heads and projections, including the extra heads induced by the LCA. As a working hypothesis, we can start with the assumption that, unless there exists very strong evidence, we should only accept functional heads that are lexically expressed in some context. According to this criterion, D, C and I (in English) are acceptable categories, while *v* and I (in Dutch) are not (at least not as long as strong evidence does not exist). Displacements ("movements") without external motivation (in terms of information structure or highlighting) should be avoided. Strict application of Occam's razor can frustrate conceptual innovation sometimes, but linguistic theory has often fallen victim to the opposite danger, namely the uncritical acceptance of new categories and derivations without accompanying robust evidence.

Let us no see what these considerations mean for the structure of the Dutch middle field. Zwart (2007) discusses the following facts (his (10)):

(28) a. als *je* daarom   morgen   erg   hard werkt...
          if you therefore tomorrow very hard work
          "if your therefore work very hard tomorrow…"

      b. *als daarom *je*   morgen   erg hard werkt
           if therfore you tomorrow very hard work

According to Zwart, it is a standard assumption that the adjuncts are outside of the VP. As the subject *je* (you) has to be to the left of the adverbials in cases like (28), the conclusion is inescapable, according to Zwart, that there is a subject position between C and VP. Well, the inescapable subject position is hardly an issue. Since the earliest generative studies of Dutch, it has been taken for granted that there is a subject between C and V (rather than VP). Zwart's other two assumptions are historically, and perhaps factually, incorrect. Throughout the history of generative grammar, it has regularly been assumed that at least a subclass of adverbials is part of the VP, by adjunction or by other means.

More importantly, there are very good reasons to assume that the entire clause is a projection of V. Even if we label the top parts of the clause as IP and CP, they are still in some sense predictable extensions of the smaller VP. Therefore, Van Riemsdijk (1978) and Koster (1978) followed Jackendoff (1977) in assuming that the clause is a V projection (called V''' = V triple-bar). In both Koster (1978) and (1987), I have argued that the relevant bounding nodes for island conditions are maximal projections of lexical categories like N, P and V. Since neither IP nor the smaller VP play a role in island conditions, the optimal generalization can only be made if it is assumed that CP is the maximal projection of V. Careful reading of Chomsky (1986) shows that the complications in formulating island conditions become almost insurmountable if one starts from the ill-advised assumption that the lower projections IP and VP are also relevant for island conditions.

From this perspective, it does not mean very much to say that adverbials are outside of the VP or that subjects are between C and VP. Both subjects and adverbials are constituents of the extended V projection. What Zwart really means, I understand from the context, is not the uncontroversial idea that there is a subject in the middle field, but the much more controversial idea that this subject is in the Spec of some extra functional projection (IP, AgrSP and currently TP). It is the latter, not the former hypothesis that I rejected in the previous sections: there is no convincing evidence that the subject is in some Spec of a functional projection in the Dutch middle field. This leads me to the following simplified cartography of the Dutch middle field and its left edge (where DP_{SU} is the subject):

(29) $[_V{}^3$ XP $[_V{}^2$ **C** $[_V{}^1$ DP$_{SU}$ ... $\mathbf{V^0}$]]]

V^3 corresponds with CP in other theories, V^2 with C' and V^1 with IP. The idea is that elements (in predictable order) are just added to the V projection. One could see this as a successive, lexically mediated application of binary Merge or as the equivalent of adjunction in earlier theories. The projection number , the i of V^i (i≥0), is only convenient notation and indicates the order of adjunction, i.e., V^i immediately dominates the ith adjunction (or application of Merge) to V.

XP and C are edge elements ("Vorfeld") and V^1 is the middle field ("Mittelfeld"). The version of the *Vorfeld* in (29) is relatively simple and will do for most cases of Dutch (but recall the extension with a topic position in (18a)). It should be kept in mind, however, that what is shown in (29) is a simplification (see Rizzi (1997) for a more elaborate version of the left periphery).

The other edge (to the right of (29), the "Nachfeld") is omitted here. It will be only discussed in passing in this article. It is the possible *locus* of adverbial PPs in Dutch and particularly of anchored extensions. An example is right dislocation:

(30)   Ik heb *hem* gekend, *die jongen*
        I have him known, that boy
        "I knew him, that boy"

Typically, the syntactic function (case, theta role) is assigned to the anchor on the middle field (*hem* in (30)), while the extension only adds non-functional information. With definites (as in (30)), extensions often show a falling intonation (sometimes inaccurately referred to as "comma intonation"). With indefinites, like the equatives discussed by Ross (1969), the extension is often stressed and in focus:

(31)   Hij heeft *iets moois*   gebouwd: *een gouden igloo*
        He has something beautiful built: a golden igloo
        "He built something beautiful: a golden igloo"

 In Dutch, non-anchored material in the *Nachfeld* is rare. In fact, the main exception is formed by adverbial PPs. All other constituents occurring in the *Nachfeld* have an anchor on the middle field, "extraposed" relative clauses, clausal complements and PPs.

The middle field itself (V^1 in (29)) consists exclusively of DPs and building blocks of predicates, i.e., possible extensions of the minimal predicate V^0. The latter include APs, PPs and adverbials. In contradistinction to earlier work, I now assume that this is all there is to the Dutch middle field. I am particularly giving up an idea of the last 15 years that turned out to

be unproductive in the long run, namely that the Dutch middle field contains functional projections for objects like AgrOP, AccP, etc., next to the IP, TP, AgrSP for subjects that we already discussed. Like in the case of function projections for subjects, a purge is long overdue because the heads of these alleged projections were never demonstrated beyond reasonable doubt and their Specs served, like the Specs hosting subjects, as the landing sites for numerous unmotivated movements believed to be triggered by the need for "feature checking."

In the previous sections, I targeted IP and its variants (TP, AgrSP). In the next section I will focus on AgrOP (or AccP) and its role in scrambling and the argument for the idea that Dutch conforms to the LCA and therefore is SVO (instead of SOV).

6. Against scrambling as minimalist feature checking

If we compare English with languages like Dutch or German, we observe that there is an enormous difference in DP mobility. In the Germanic OV languages German and Dutch, practically all adjuncts can occur to the left of the V, as long as they -with neutral intonation- obey the Cinque hierarchy (the universal order that Cinque (1999) postulated for adverbials). The DPs can freely been distributed between any pair of adverbials, as long as the DPs obey the unmarked order SU>IO>DO, which is partially reflected by case. As a result, DPs can, under preservation of neutral intonation, walk indefinitely far away from the verbs to which they are complements. Thus the DP *Jan* ("John") can occur with neutral intonation in any of the positions indicated by *(Jan)* in (32):

(32)   dat we *(Jan)* waarschijnlijk *(Jan)* gisteren *(Jan)* tijdens de pauze *(Jan)* plotseling *(Jan)* zagen
          that we John probably   yesterday   during the break   suddenly   saw

This possible leftward shift, known as "scrambling," is remarkable, particularly because none of this is possible in English. The English minimal VP is completely closed on its left side:

(33)   *He has (probably) *the book* (suddenly) [_{VP} read --]

Corver and Van Riemsdijk (1994) observed that scrambling is much more common in SOV languages than in SVO languages, which suggests that the striking scrambling difference between English and Dutch has a deep connection with the fact that Dutch is OV and English VO. If we look to the right, and if we ignore anchored extensions like heavy NP shift, we see that the minimal VP is closed in both English and Dutch:

(34) a.   *Hij heeft -- gelezen (tijdens de pauze) *het boek*
                 he   has   read   during the break the book

      b.   *He has read -- during the break *the book*

How to account for Dutch/German scrambling and how to explain the difference and similarity with English? In the next section, I will propose a very simple solution for the facts in question, improving (I hope) on an earlier account in Koster (1999).

   The study of scrambling in Dutch led to the discovery of a well-known paradox, most clearly described by Vanden Wyngaerd (1989) (see also Zwart 1993, 306 ff. and Neeleman (1994, ch. 3)). The problem is this. With respect to anaphoric binding and weak-crossover, the scrambled DPs behave as if they are in A-position. Unlike what Vanden Wyngaerd and Zwart assume, this counts against a movement solution for scrambling, because, apart from the subject position, there are no obvious new A-positions to the left of the V. We can of course say that the landing site (the Spec, AgrOP) is also an A-position, next to the original complement position adjacent to V. But that is an unnecessary extension of the notion A-position. There is no reason to assume more than exactly one A-position for the subject of the clause and for each complement of the V.

   What the facts seem to show is that, unlike what we see with Wh-movement and Topicalization, scrambling preserves the A-status of the scrambled DPs. This is in accordance with the structures proposed above (like (29)), which entail that the middle field is part of the V projection (see also Neeleman 1994, 74).

   The paradox seemed to arise when it was proposed (among others by Bennis and Hoekstra 1984) that scrambling can license parasitic gaps (*pg* stands for "parasitic gap," *t* stands for "trace"):

(35)   Dat Jan [het boek]$_i$ [zonder *pg*$_i$ in te kijken] t_i aanprijst
       that John the book   without   at to look   recommends

At the time, it was assumed that parasitic gaps can only be licensed by elements in A'-position, like fronted Wh-phrases. So, if (35) involves a parasitic gap bound by *het boek*, the DP *het boek* must be in an A'-position, it was thought. However, and certainly with the wisdom of hindsight, I believe that Neeleman (1994, 87 ff.) convincingly showed that a phrase like the PP containing the alleged *pg* in (35) can be predicated over a DP in A-position. Earlier on, Zwart (1993, 309ff.) had already shown that the *pg* constructions like those of (35) have properties substantially different from what we see in parasitic gap constructions with Wh-movement.

Neeleman's basic insight, partially derived from Chomsky (1986), was that phrases like the *pg* phrase in (35), involve a zero operator (36a), making them comparable to *easy-to-please* constructions (36b):

(36) a. $[0_i$ zonder $[t_i$ in te kijken]

     b. I consider John [easy $[0_i$ to please t_i]

As is generally believed, *easy-to-please* phrases are predicated over DPs in A-position. If such is the case in (35), the paradox is solved: scrambled DPs are in A-position.

     Neeleman's insight was confirmed by various observations by others, such as those about nominalizations (reported to Neeleman in personal communication by Den Dikken and Hoekstra (*op. cit*., p. 90)):

(37) Het $[0_i$ zonder t_i in te kijken] aanprijzen   van *boeken*$_i$
      the   without   at to look recommending of   books
      "The recommending of books without having a look at them"

If anything, *boeken* is here in an A-position and not in an A'-position c-commanding the gap. In fact, Dutch is even richer than English in predicates with object gaps, like the modal infinitive (with or without the adjective found in English constructions):

(38) Deze vogel is (makkelijk) te vangen
      this bird   is   easily   to catch
      "This bird can be (easily) caught"

These modal infinitives are uncontroversially predicated over DPs in A-position, and what matters in this context, they can be combined with the alleged parasitic gap phrase in this function:

(39) Deze vogel$_i$ is zonder t_i aan te raken (niet makkelijk) t_i te vangen
      This   bird   is without   to touch   not easy   to catch
      "This bird is not easy to catch without touching it"

Several other examples could be added and, altogether, there is overwhelming evidence that scrambling does not involve A'-movement. I agree with Neeleman (1994) that as a consequence the whole concept of scrambling-as-movement collapses. It simply does not make sense to create an extra A-position for objects next to their complement position. However, if scrambled DPs are base-generated (whatever that means in 2008), we still have to explain why English fails to show similar base-generated scrambling and why V-object

adjacency does not matter for Dutch and German. Before suggesting a solution to that problem, I would first like to discuss the line of research followed by Zwart and others (including myself), in which Vanden Wyngaerd's original idea of movement of scrambled DPs to the Spec of AgrOP was maintained in one way or another. This line of research led to the belief that, preceding the OV order of Dutch, there is an VO stage that conforms to Kayne's LCA.

7. The new VO order of Dutch

So far, we have concluded that the creation of an extra A-position for objects (by movement to the Spec of AgrOP) does not make sense. Scrambling-by-movement was nevertheless maintained and became to cornerstone for arguments in favor of a new underlying SVO order for Dutch. Zwart (1997), in particular, concluded that since scrambled object DPs are moved out of their VP anyway (to Spec, AgrOP in the middle field) we could just as well assume that the DP had its origin post-verbally, entailing an underlying VO structure in accordance with Kayne's LCA. There were several reasons to welcome the perspective that Dutch would be head-initial for the VP after all. First of all, most other Dutch constituents, like PP, AP and NP are by and large head-initial. A head-initial VP paved the way for a uniform constituent order for Dutch. Furthermore, it was thought that underlying word order would show V-NP adjacency, as in English. As per the Corver/Van Riemsdijk observation cited before, OV structures often correlate with scrambling, suggesting that OV structures involve movement of the object to the left, as in Vanden Wyngaerd's movement to Spec, AgrOP.

The first reason is still a point of concern and it is an interesting question why languages might deviate from uniform head-initial or head-final order. As I will suggest in what follows, it has certain advantages for languages to have the head-final order OV in the main, verbal projection, even if the other constituents are head-initial. The second reason is less valid and hopefully undermined by what has been discussed so far. First of all, movement of the object to the left does, strictly speaking, not require that the object has its origin on the right of the verb. It is also compatible with Vanden Wyngaerd's original proposal, in which the object had its origin on the left of the verb (OV). Second, as we concluded just now, the idea of movement to a position like Spec, AgrOP to create a second A-position for objects does not makes sense . Third, the postulated head, AgrO, was proposed for certain facts in France (see Kayne 1987), but was never shown to exist in Dutch, apart from the fact that some Spec of some functional projection was seen as the desirable landing site for movement on theory-internal grounds. Fourth, there was no clear rationale for the movement in question.

It was said that the movement of the object was triggered by the necessity to check case, but that is the kind of motivation for movement that more and more seemed to be arbitrary or even circular.

All in all, it must be concluded that it was a mistake to assume DP movement as the vehicle of scrambling. If there is no movement-based scrambling along these lines, there is no reason to assume that some VO order derivationally precedes the "classical" OV order for Dutch and that the deepest order of Dutch is in accordance with the LCA.

In addition to the problems just mentioned, the LCA seemed to require massive reordering, not only of the DP but also of AP, PP and other constituents. In practice, this meant more arbitrary movements for a field that was already close to collapsing under the load of arbitrary movements. In the long run, the reorderings required by the LCA could not be worked out in a satisfactory way, not for Dutch and even less so for the more uniform head-final languages like Japanese.

Last but not least, some specific analyses of Dutch based on the LCA turned out to be also unsatisfactory in the long run. In Koster (1994), for instance, I proposed that CP complements of verbs remain to the right of V (Dutch has V CP instead of CP V) as a residue of the original head-compliment order. The ideas was that DPs move to the left to check their case, but that CPs stay in their original postverbal complement position because they lack a case that has to checked. This idea was tacitly given up in later work, when I concluded that postverbal object CPs are usually not in complement positions. Instead, they are on the right the right periphery as anchored extensions, with a DP anchor on the middle field (Koster 2001).

Since Vanden Wyngaerd's movement to Spec, AgrOP only accounted for the scrambling and case checking of direct objects, I proposed in Koster (1999) to replace AgrOP by an AccP and to add a DatP for the case checking and very similar scrambling of indirect objects. This meant more arbitrary movement and more doubling of A-positions. The account in question was also an attempt to explain the lack of scrambling in English by moving the entire VP to the case-checking positions, both as a matter of pied piping and to make these positions inaccessible for the case checking of individual DPs. Apart from the fact that I now reject displacement ("movement") for the sole purpose of feature checking, this hypothesis also met certain empirical problems that could not be worked out in a satisfactory manner.

In sum, then, we must conclude that the LCA, at least for the time being, has ceased to be a productive idea for the analysis of Dutch and that arbitrary functional projections like AgrOP, AccP and DatP must share the fate of I, AgrS or T, namely their irrelevance for the

analysis of Dutch. After this purge, we end up with a fairly classical picture of the structure of Dutch, i.e., with underlying OV order and no extra functional categories between V and the left edge other than C.

8. Scrambling explained

We still have to explain why OV languages like Dutch and German have leftward scrambling of the DP complements of V, while an OV language like English is very rigid and without the benefits of scrambling. As a preparation to an explanation, let us consider for a moment what the purged middle field of Dutch is like. It consists of the V (and its complements) and of adverbials that expand the predicate that minimally consists of a V. In fact, unlike a typical DP, the AP and PP complements of V are also predicate extensions, which follow the logic of the Cinque hierarchy and have therefore fairly rigid word order. Only DPs scramble freely, so, why is that the case?

The reason, it seems to me, is that the constituents of the middle field form a pattern of nested predications ("aboutness"-relations). Consider, for example, a structure like (40):

(40)   dat [*Peter* [$_V^3$ gisteren   [$_V^2$ *het meisje* [$_V^1$ vaak [zag]]]]]
        that Peter   yesterday   the girl   often saw
        "that Peter often saw the girl yesterday"

The primary predication is [*Peter* V^3], i.e., [*gisteren het meisje vaak zag*] is something said about *Peter*. However, within the complex predicate, we find a secondary predication, namely [*het meisje* V^1], in which [*vaak zag*] is predicated over *het meisje*. Scrambling here means the possibility to shift the DPs against the background of the adjuncts, which form a fixed order in accordance with the Cinque hierarchy. AP and PP complements fit in this order and can therefore not undergo neutral scrambling. DPs, however, form a hierarchy of their own (SU>IO>DO, often expressed by case) completely independent of the Cinque hierarchy and are therefore not kept in their place by the Cinque hierarchy. This makes it possible to freely scramble the DPs (the subjects of the nested predications) and to vary the content and information structure, by changing the relative order of DPs and predicate parts. We can, for instance, replace (40) by (41), with *het meisje* one step up:

(41)   dat [*Peter* [$_V^3$ *het meisje* [$_V^2$ gisteren [$_V^1$ vaak [zag]]]]]
        that Peter   the girl   yesterday   often saw

Thanks to this beautiful mechanism, OV languages can easily vary their predication ("aboutness") patterns to serve whatever has to be expressed. Scrambling in this sense is a

rich tool of linguistic expression and , since it is made possible by OV and not by VO, it pays for languages to maintain head-final order (OV) even if other projections are head-initial.

But why is this pattern more readily found in OV languages? The answer, it seems to me, is that there is only one natural order for predication (in the sense of "aboutness"):

(42)   **universal order of predication (i ≥0):**
        DP V^i

Let us for present purposes adopt one of the better ideas that arose under minimalism, namely that linearization is independent of the hierarchical order of constituents. We can assume then that the hierarchical order of languages is supplemented with linearization principles and that (42) is an example of that. With very few exceptions, the languages of the world are either SOV or SVO. VSO is a variant of VO, but subject-final languages (VOS or OVS) are so rare, that one might consider the possibility that the subjects in these languages are extensions of an phonologically empty anchor in the "normal," initial subject position. Anyhow, it is fair to say that there is overwhelming evidence for the universal validity of (42) for primary predications. The order of (42) is not accidental or arbitrary but the only natural order: if one is going to say something about X, it is natural to mention X first and to say next whatever one has to say about X. DP in (42) corresponds to X and V^i to whatever is said about X. Call (42) a "third factor" principle in the sense of Chomsky (2007).

The way (42) is formulated entails that it not only holds for primary predications, but for *all* predications, including the nested secondary predications that we just discussed. In other words, the order of (42) defines a wellformed predication. If the middle field is the realm of predications, it follows immediately from (42) that scrambling is possible to the left but not to the right. To see this, compare the following scrambling patterns, (43a) with leftward scrambling and (43b) with rightward scrambling:

(43)   a.   [DP [$_V^1$ Adv [V^0]]]

        b.   [[[V^0] Adv $_V^1$] DP]

In (43a) we see a predication in accordance with (42), namely [DP V^1]. The corresponding predication in (43b), however, would be [V^1 DP], which is not a wellformed predication according to (42). All these steps can be repeated, if one wants, and it will be clear that it follows from (42) that leftward scrambling (43a) is possible, while rightward scrambling (43b) is impossible. This is the key to understanding the scrambling difference between Dutch

and German on the one hand and English on the other hand. The only thing we have to add is language-specific linearization (comparable to the traditional OV/VO parameter):

(44) **language-specific linearization: (j, k ≥0):]**
    a.   Dutch: DP V^j
    b.   English: V^k DP

This accounts for the fact that Dutch has scrambling to the left, because a scrambling pattern like (43a), i.e., DP V^1, fits the pattern of (44a). DPs to the right of V and its projections are not in accordance with (44a) and therefore not allowed.:

(45)   *dat   Jan [[[[las $_V$^{0}] (het boek) $_V$^{1}] in de tuin $_V$^{2}] (het boek)]
            that John   read   the book   in the yard   the book

Interestingly, the English linearization (44b) allows rightward scrambling in principle, but it would lead to conflicts with the universal predication order (42). The following illustrates this:

(46)   *John [[[read $_V$^{0}] yesterday $_V$^{1}] the book]

The predicate [V^1 the book] is possible according to (44b), but it is excluded by the universal predication order (42).[10] While (42) prevents rightward scrambling for English (and other VO languages), the language-specific linearization (44b) excludes leftward scrambling for English:

(47)   *John [the book [$_V$1 often [$_V$^{0} read]]]

[the book V^1] is not a possible linearization for English, as it is ruled out by (44b). In principle, then, these simple and natural linearization rules explain why OV languages like German have scrambling and only scrambling to the left, while a VO language like English has neither scrambling to the left nor to the right.

It has to be kept in mind that I have simplified matters somewhat for the sake of exposition. I have limited myself, for instance, to the linearization of DPs. The actual language-specific linearization rule for Dutch generalizes over all constituents except adverbial PPs and perhaps CPs:

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[10] Note that strictly speaking, [V^0 DP] is also ruled out by (42), contrary to fact (*read the book* is a grammatical sequence). One can solve this problem by assuming that there is complementation next to predication. Complementation requires adjacency (or V^0) and is sufficient to accept a DP, even if predication does not apply. Non-complement DPs can only be ruled in by (42).

(48)   **linearization in Dutch (i ≥0):**
       XP V^i, where XP = DP, AP and non-adverbial PP

According to this rule, most Dutch constituents are placed to the left of the V on the middle field, which the exception of adverbial PPs (and perhaps CPs). The assumption that adverbial PPs are not linearized for Dutch means that their hierarchical order follows the Cinque hierarchy but that they can, with neutral intonation, appear to the left of the V and -in mirror order- also to the right of the V (for the mirror phenomenon, see Koster (1974), Barbiers (1985) and Cinque (2008). Liberated from the LCA, the mirror phenomenon can be accounted for in this relatively simple way, without complicated and unmotivated roll-up procedures. The exact linearization principles for English are more complicated than (48), particularly because the order of adverbials (pre- or post-V) is hardly understood beyond the fact that, hierarchically, they seem to follow the Cinque order.

8. Summary and conclusion

The primary goal of this article has been the defense of the classical, pre-minimalist analysis of the structure of Dutch. According to this analysis, Dutch is underlyingly SOV while V2 is seen as a lexicalization of the Tense operator in the same position as C. Alternative analyses, with V2 to Infl (AgrS, T) or some other functional head were rejected. Furthermore, the movement analysis of scrambling on the Dutch middle field was rejected, together with AgrOP (and its variants) and the LCA-inspired SVO structure of Dutch. What we have seen since *Barriers* (Chomsky 1986) is a true proliferation of often poorly motivated functional projections and a true proliferation of arbitrary "movements" said to be triggered by the vacuous concept of "feature checking." Kayne's LCA (1994), interesting as it was, combined forces with this trend by leading to even more arbitrary projections and movements. Altogether, these developments have threatened to turn generative analysis into a descriptive technology, according to which description is successful if it can be reduced to the familiar projections and movements.

More generally, "movement" in its various guises (transformations, "move alpha," internal merge) was diagnosed as a major factor in the partial decline of generative grammar. In the 1970s, insisting on "movement" obscured the fact that the move to lexicalism (Chomsky 1970) and X-bar theory had made generative grammar a (more explicit) continuation of the tradition rather than something radically new. The transformational families of Wh-movmeents and NP-movements had, thanks to the "interim" step of structure-preservingness, been shown to be superfluous. As a result, the outputs of these movements

were falling within the purview of X-bar theory. This was the end of transformational grammar as something revolutionary new, because X-bar theory is entirely compatible with the tradition. In fact, it is a continuation of a view held at least since the Stoics, namely that syntactic structures are spelling out the properties of lexical items (cf. Egli and Egli-Gerber 1992). The generative period has seen an enormous growth of descriptive coverage and insights into languages. This growth was possible thanks to more explicit and more uniform techniques at a mondial scale (trees, labelled bracketings, more systematic use of empty categories, etc.).

However, the conceptual discontinuity with the past, particularly with several European forms of structuralism, was highly exaggerated. In fact, the most revolutionary form of generative grammar flourished between 1955 and 1965. Generative grammars of those days formed a real revolutionary deviation from the tradition, as syntax was not seen as a spell-out of lexical properties, but as something modelled after the lexicon-independent formal systems borrowed from recursive function theory (see Tomalin 2002 for an historical account). This style of generative grammar gradually disappeared after 1965, thanks to the rediscovery of the lexicon and of the traditional insight that syntax reflects the properties of lexical items. Curiously, the revolutionary rhetoric of the field survived this failed revolution of early generative grammar. It seems to me that the irrational tenacity with which the concept of "movement" was maintained was a (perhaps unconscious) attempt to maintain a -tenuous-connection with the period in which generative grammar seemed a revolutionary departure from structuralist grammar: just X-bar theory is tradition, X-bar theory plus "move alpha" could still be something revolutionary. Minimalism's recent attempts to distance itself from X-bar theory and other cartographic notions continues the sense of revolution but is illusory, as it runs into the same problems as lexicon-independent early generative grammar. In general, there is no syntax (PS rules, transformations, "move alpha", Merge) independent of our human-made lexicons (see Koster 2008 for further discussion).

Apart from being superfluous, "movement" was a relatively innocuous concept until the 1970s, because it was mostly used to state externally motivated displacements (as in (overt) Wh-movements and NP-movements). It became arbitrary technology with the introduction of Logical Form and its derivation by covert movement. Non-visibility destroyed the external motivation for displacements and the arbitrariness of LF-movement was further highlighted by the fact that it did not even show the defining properties of movement rules (expressed by Subjacency or some variant of it).

Further decline in explanatory adequacy was caused by the proliferation of arbitrary functional projections and arbitrary movements. i.e., displacements that were not externally motivated but theory-internally, triggered by the unproven need for "feature checking." In this article, I have proposed a purge of those arbitrary notions, leading to a partial return to the more classical analysis of Dutch. The basic sentence structure of Dutch can be seen as a V-projection of the following form:

(49)   left periphery | **C** | middle field | **V** | right periphery

The left periphery is relatively simple in Dutch and might be more elaborated for other languages (as proposed by Rizzi 1997). The right periphery is used mainly for anchored extensions. C is used to express typing (in the sense of Cheng 1991) and scope marking (Wh, tense). As a tense operator, C can also be expressed by the finite verb, as in V2. There are no other "landing sites" for V2, as it is highly implausible that a sentence has more than one tense operator.

The middle field is the realm of predication. The basic arguments (DPs) and predicate parts (subcategorized PP and AP) are projected from V, while the many (mostly optional) adverbials have a cartographic order described by the Cinque hierarchy and serve to expand the basic predicate given by V (and its AP and PP complements). Since DP order conforms to a hierarchy independent of the Cinque hierarchy (SU>IO>DO, reflected by case) rich and flexible patterns of predication are available. Thanks to simple linearization rules, OV languages like Dutch and German show the scrambling responsible for this flexibility, while (partially universal) linearization works in such a way that English lacks the benefits of scrambling. Non-linearization of adverbial PPs is responsible for the mirror phenomena observed since Koster (1974).

Note that (49) is a cartographic scheme, as it is a pattern entirely projected from V. It is the Vs template environment so to speak. Sentence generation is the spelling out of that template. Merge plays at best a role as a characterization of the background capacity that makes complex template structures possible in the first place. In that sense, belief in the reality of Merge and X-bar theory are entirely compatible. It is an error to see Merge as the theoretical successor of X-bar generation, since the latter is not an alternative to the former but its application. There is no reason to believe that Merge, in abstraction from its lexical application, has anything to do with language at all, just as there is no reason to believe that our innate lung capacity has any inherent connection with its application in, say, playing wind

instruments like trumpets (see Koster 2008 for more discussion of the arbitrariness of form-function relations).

X-bar theory, incidentally, should not be seen as something static but as an empirical theory about the template structure associated with lexical items. As with other empirical theories, one might hope that it will be modified as research goes on. A structure like (49) accounts for the template structure associated with verbs, but it goes way beyond the very simple X-bar structures with only one Spec and one complement.

Last but not least, (49) expresses a cartographic scheme with a long tradition. V and C can be seen as the *Satzklammer* (sentence brackets) that separate the predication part of the sentence from the peripheries with their specific functions (focusing and other highlighting, anchored extension, etc.). Some linguists believe this *Satzklammer* theory goes back at least to the work of Simon Heinrich Adolf Herling (1780-1849) (see Kathol 2000 for some discussion, and also Elmentaler 1996). The *Satzklammer* scheme was further developed during the 19th and 20th centuries and continues to be highly relevant for our current theories (cf. Zwezerijnen 2008). What it shows is that current cartographic approaches to syntax are a further development of the insights formulated by unjustly forgotten generations of the past.

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