DUTCH SYNTAX
A MINIMALIST APPROACH

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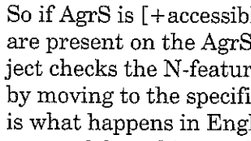
Summary *by the author*

1. Main points

This thesis argues for two main points:

(1)
1. Licensing relations are sisterhood relations
2. All phrases in Dutch have the structure in (2), where *YP* precedes X^0, and X^0 precedes *ZP*.

(2)



The *licensing relations* in (1.1) include relations of theta-role assignment and licensing of Case and Agreement. The latter is assumed to take place in functional projections, as in Chomsky (1991, 1993). (1.1) is studied in connection with the syntax of Dutch, but is assumed to be universally correct. It is argued that the functional domain of Dutch sentences includes (at least) agreement projections for subjects (*AgrSP*) and objects (*AgrOP*), a projection for licensing tense (*TP*), and projections for licensing "topics" (*TopP*) and wh-elements (*WhP*). These projections are ordered in the sequence *WhP–TopP–AgrSP–TP–AgrOP*.

According to (1.2), both the functional projections and the lexical projections in Dutch are organized as in (2), i.e. the structure of Dutch is *head initial*. If Kayne (1994) is correct, this is also a universally correct statement about language. (The replacement of traditional *X'* by *XP* goes back at least to Hoekstra 1991.)

2. Licensing relations

It follows from (1.1) that *specifier– head agreement* (in the technical sense) does not exist. That is, *YP* in (2) is not licensed by X^0 but by the combination of X^0 and *ZP*, *XP*. This *XP* is called the *Projection* of X^0 (the top *XP* node is called *Segment*). Descriptively, spec–head agreement still exists, in the sense that a subject agrees with AgrS (which in turn agrees with the verb, cf. Chomsky 1993). Therefore, the *XP* Projection must have access to the features of X^0 that are relevant in the agreement relation (in our example, the AgrSP Projection must have access to the N-features of AgrS). Languages may differ in whether X^0 is *accessible* to its Projection or not. The following is proposed:

(3)
1. A functional head α is [accessible]
2. A [–accessible] functional head α is made [+accessible] by removing the V-features of α

So if AgrS is [+accessible], the N-features of AgrS are present on the AgrSP Projection, and the subject checks the N-features (and its own features) by moving to the specifier position of AgrSP. This is what happens in English, where the nonadjacency of the subject and the finite verb indicates that verb movement to AgrS is not needed for licensing the subject:

(4)
John probably left

If AgrS is [–accessible], the V-features of AgrS have to be removed before the subject can be licensed in the specifier position of AgrS. This is what happens in subjectinitial main clauses in Dutch, where the adjacency between the subject and the verb indicates that the subject and the verb are in a specifier–head configuration:

(5)
a. Jan ging waarschijnlijk weg
   John went probably away
b. *Jan waarschijnlijk ging weg
   John probably went away

In embedded clauses in Dutch, the verb does not move to AgrS:

(6)
a. ..dat Jan waarschijnlijk weg ging
   that John probably away went
b. *..dat Jan ging waarschijnlijk weg
   that John went probably away

This leads to the conclusion that the movement of the finite verb *ging* to AgrS in (5a) cannot be described by assuming that the V-features of AgrS are strong. If the V-features of AgrS in Dutch were strong, (6b) should be grammatical and (6a) should be ungrammatical.

For this reason, it is assumed that the V-features of AgrS in (6a) are removed by moving AgrS to a higher functional head (i.e. Top or Wh, indiscriminately referred to as *C*). Evidence for AgrS-to-C movement is found in various dialects of Dutch, German, and Frisian, in which the complementizer agrees with the subject ((7) from South Hollandic):

(7)
a. ..dat ik kom
   that-SG I come-SG
b. ..datte we komme
   that-PL we come-PL

It is assumed in the thesis that AgrS-to-C movement effectively removes the V-features from the AgrS position, rendering AgrS [+accessible] and making licensing of the subject via the AgrSP Projection possible.

3. Verb Second

If AgrS moves to C, C ends up with a weak V-feature, eventually to be checked by verb movement to C.

We may now assume that the presence of the weak V-feature in C again potentially blocks N-feature checking by the CP Projection.

We therefore expect there to be a difference between languages in which movement of a phrase to the specifier position of CP (e.g. to the specifier position of TopP) is accompanied by verb movement to C, and languages in which such verb movement to C is absent.

Absence of verb movement in topicalization constructions occurs in English:

(8)
a. Probably John left
b. *Probably did John leave

Again, we can say that the relevant functional head (Top) is [+accessible] in English.

In Dutch, topicalization is always accompanied by verb movement to Top:

(9)
a. Waarschijnlijk ging Jan weg
   probably went John away
b. *Waarschijnlijk Jan ging weg
   probably John went away

Again, we can say that the relevant functional head (Top, or the AgrS head adjoined to Top) is [–accessible] in Dutch. Consequently, the V-features that are present on C (i.e. those of AgrS) have to be removed by moving the verb to C and checking the V-features of AgrS off.

Verb movement to C then follows from the same mechanism that makes verb movement to AgrS necessary. This explains the similarity between the two movement processes, which has led researchers to assume a single V-to-COMP movement rule in Verb Second languages like Dutch. In the present approach, the verb second phenomenon is the result of overt licensing of heads and phrases in functional projections, i.e. the verb has to be left adjacent to the first constituent, *no matter which* position the first constituent occupies (Spec,AgrSP or Spec,CP). This has the advantage that a canonical position for the subject can be assumed, whereas in previous approaches one was forced to assume an additional subject preposing rule for subject initial sentences (moving the subject to Spec,CP)(these considerations build on Travis 1984).

In embedded clauses like (6a) and (10), in which a complementizer occupies the C-position (optionally in (10)), there is no verb movement to C:

(10)
Ik vraag me af wie (of) het gedaan heeft
I wonder who if it done has
'I wonder who did it.'

This leads to the conclusion that (3.1) only applies to empty functional heads. If so, the accessibility issue does not arise with respect to C in embedded clauses.

4. Phrase structure

The analysis of verb movement suggests the following:

(11)
1. Dutch sentences feature more functional projections than just CP
2. The functional projections of Dutch are all head initial

Both points are further strengthened by an analysis of the distribution of weak pronouns in Dutch and West Flemish (a dialect of Dutch particularly suited for the study of clitics). It is argued that the weak pronouns in question are clitics. Assuming that clitics signal functional head positions, the various (sentence initial) positions in which clitics can appear lend support to the structure of the functional domain involving head initial AgrSP, TP, and (maximally two) AgrOPs. Various other tests suggest that CP should be split up into TopP and WhP, both head initial as well.

The following generalization about clitics in Dutch can be made:

(12)
Clitics never appear to the right of the functional projection in which the noun phrase which the clitic replaces would have been licensed

Thus, indirect object clitics never appear to the right of (full) direct objects, because the AgrOP for indirect objects is situated to the left of the AgrOP for direct objects. This argues against the hypothesis by Sportiche (1992), according to which clitics appear in the head position of a Clitic Phrase (or move higher). The distribution of clitics is linked to the agreement phrases, which suggests that clitics appear in the head position of the agreement phrases (or move higher).

5. Dutch as an SVO language

If the functional projections in Dutch are all head initial, so must the lexical projections be.

Embedded clauses in Dutch display the following asymmetry between noun phrase complements and clausal complements:

(13)
a. ... DP V
b. ..... V CP

This is explained if noun phrases (DPs) move to their licensing position (in AgrOP) *overtly*. The same trigger for movement does not apply to clauses, assuming that licensing in AgrOP amounts to Case licensing, and that clauses do not require Case licensing.

If so, *CP* in (13b) indicates the base position of the verb's complement, and the VP in Dutch is head initial. The hypothesis that the VP in Dutch is head initial also leads to a more elegant analysis of verb clustering (Verb Raising) and allows us to eliminate the rule of Verb Projection Raising.

Postpositional PPs in Dutch are argued to involve raising of a PP complement (of a head initial PP), headed by an empty preposition:

(14)
a. [[P DP]$_i$ [P t$_i$]]
b. [P DP]

Postpositional PPs are shown to pattern with circumpositional PPs, which also have the structure in (14a). Prepositional PPs are less complex, showing the structure in (14b). PPs, then, are also uniformly head initial.

A similar argumentation is presented for APs, while NPs and DPs are unequivocally head initial. If the complement of a verb is a Small Clause (*SC*), the subject of the SC is raised to AgrOP (or AgrSP), and the predicate of the SC is raised to the specifier position of a functional projection designated for the licensing of embedded predicates (*PredP*). The spec–head constellation of the predicate and the verb (which eventually moves to Pred) gives rise to the wellknown complex predicate effects.

6. The minimalist approach

The thesis is written in the spirit of theories of Chomsky (1993) and Kayne (1994).

It generally takes a weaker stance than Kayne (1994) on the issue of possible structures. For example, it follows from the distinction between Segment and Projection that an XP can take an adjunct in addition to having a specifier (sparing us a number of additional projections for which there does not seem to be morphological support). It is also assumed that clitics generally adjoin to the right of their host, suggesting that adjunction of clitics is not syntactic adjunction and falls outside of Kayne's *Linear Correspondence Axiom*. However, one of the two main points argued for in the thesis, (1.2), concurs fully with Kayne (1994).

The thesis deviates in certain points from Chomsky (1993) as well, but these are not obviously weakenings of the program. For instance, X-bar theory is eliminated and replaced by the following generalization:

(15)
If β^n is adjoined to α, the projection of α is an α^n

Secondly, the conflict between the two requirements of economy of derivation (shortest move versus fewest steps) is resolved by arguing that the shortest move requirement is dispensable in the minimalist approach. (This allows us to analyze verb movement to C as a movement that skips AgrS in Dutch: AgrS having moved to C independently, there is no minimalist requirement, e.g. in terms of feature checking, forcing the verb to land in AgrS on its way to C. This explains among other things the stranding of clitics to the right of the subject in inversion constructions in Dutch.) Finally, the concept Form Chain is modified in the following way. Long distance wh-movement is analyzed as involving generation of empty wh-elements in the specifier positions of intermediate WhPs, after which the fronted Wh-element moves in one step and is linked up with the intermediate wh-elements in an interpretive process. This appears to be the only way in which successive cyclic wh-movement can be made compatible with the principle of Greed of Chomsky (1993).

References

Chomsky, N. (1991). Some notes on economy of derivation and representation. In *Principles and parameters in comparative grammar*, R. Freidin (ed.) Cambridge, Mass.: MIT Press.

Chomsky, N. (1993). A minimalist program for linguistic theory. In *The view from building 20*, K. Hale and S.J. Keyser (eds.). Cambridge, Mass.: MIT Press.

Hoekstra, E. (1991). *Licensing conditions on phrase structure*. Diss., University of Groningen.

Kayne, R.S. (1994). *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.

Sportiche, D. (1992). *Clitic constructions*. Ms., UCLA.

Travis, L. (1984). *Parameters and effects of word order variation*. Diss., MIT.

Review
by Marcel den Dikken

Functional heads and their movement

The standard generative analysis of the Dutch clausal system (cf. Koster 1975, Den Besten 1977 and a canon of research in their wake) has always held that Dutch is a language with an underlying OV structure. The verb follows its complement in the base, and its projection in its turn precedes the Infl-node. The OV word order of embedded clauses is then straightforwardly accommodated, main clauses being derived via movement of the finite verb to Comp (which, in contrast to Infl and V, precedes its complement). The OV base hypothesis and the assumption that in *all* headclauses movement of the finite verb to Comp obtains are both called into question in *Dutch Syntax: A Minimalist Approach*. Zwart's main arguments are built on detailed investigations of the syntax of clitic constructions and complementizer agreement phenomena in the West-Germanic dialects. These are the topic of the pivot al third chapter of the book, which follows a general introduction to the minimalist framework and a chapter laying out the central properties of Dutch syntax, its previous accounts and an initial sketch of the approach taken here. Chapter III's 200-page discussion of verb movement in Dutch and its dialects extensively develops an analysis of the functional structure of the Dutch clause involving three inflectional projections outside VP (AgrSP, TP and AgrOP), dominated by two Comp-type projections (WhP and TopP), *all* of which are *head-initial*, with left-peripheral specifiers. Basing itself on a wealth of empirical evidence from all around the West-Germania and availing itself of the machinery of the minimalist program of Chomsky (1993), Zwart's study lends important support to Kayne's (1993) claim that phrase structures are uniformly of the basic form Specifier–Head– Complement.

Constructing a strictly head-initial outlook on the *functional* structure of Dutch clauses is the heart of the matter. The functional domain is where the heat is in antisymmetric minimalism; the lexical domain, and especially its directionality, is generally not particularly exciting since, with either the lexical head or its complement undergoing overt movement in the bulk of cases, little can be ascertained about it in any direct way. Although Zwart includes a chapter on the lexical structure of Dutch (chapter IV), he can do little more there than cast doubt on arguments for the head-final nature of AP, NP, PP and VP, and compile several pieces of circumstantial evidence, centered around (by them selves) hardly convincing considerations of elegance, which might favor a head-initial approach to the lexical projections of Dutch. This chapter, then, I shall essentially ignore here. Instead, I shall focus on the argumentation for a minimalist and antisymmetric analysis of the functional structure of Dutch. (For a more extensive — but unfortunately rather negatively biased and conceptually poor — critique of many of the technical details of Zwart's thesis, I refer the reader to Gärtner & Steinbach 1994; Zwart 1994 counters most of their arguments and *en passant* updates and further develops some aspects of his 1993 analysis.)

Central in Zwart's plea for strictly head-initial functional structure in Dutch are the properties of weak pronouns, both subjects and objects. Capitalizing on the well-known dichotomy between weak subject pronouns and non-subject pronouns in clause-initial position, illustrated in (1), he argues against a uniform V-to-C movement (generalized V2) hypothesis, taking (1) to indicate that the syntactic position of weak subjects is different from that of topics.

(1)
a. *Jij/Je* hebt mij gezien
you(S.PRON)/you(S.CL) have me seen
b. *Jou/*Je* heb ik gezien
you(O.PRON)/you(O.CL) have I seen

As Zwart duly acknowledges (albeit at a rather late point: pp. 235–37), the generalized V2 analysis certainly has ways of capturing this distinction — see for instance Rizzi's (1991) functional approach to the A/A'-distinction, according to which SpecCP qualifies as an A-position iff it entertains a Spec–Head agreement relationship with the filler of the C position. But the burden of proof in this case certainly resides with such approaches and not with the alternative analysis according to which the subject pronoun in (1a) finds itself in a different position than the topicalized object in (1b). Reinvigorating Travis' (1984) asymmetric approach to V2 constructions, Zwart proposes, on the basis of (1), that subject-initial main clauses in Dutch are AgrSPs with verb movement to AgrS, while non-subject-initial main clauses continue to be larger than AgrSP. This being said, the surface word order of (1a) then dictates that AgrSP is head-initial.

With this conclusion drawn, and with the well-known evidence (see e.g. the grammatical variant of (1b)) for the head-initiality of the functional projection(s) dominating AgrSP in mind, we would now be in need of strong empirical evidence to be able to successfully argue that the rest of the inflectional structure of Dutch is head-final. Such evidence is lacking; indeed, Zwart argues, there is in fact empirical evidence in favor of TP and AgrOP being head-*initial*.

The evidence again comes from weak pronouns — this time from the syntax of object clitic constructions in West Flemish. Bearing in mind Zwart's crucial hypothesis that object clitics in West-Flemish (like their Romance cognates; cf. Kayne 1991) are AgrO *heads*, consider the central paradigm in (2):

(2)
a. Gisteren ee*'t* Valre Marie gegeven — O.CL in Comp
yesterday has-O.CL V M given
b. Z'ee*'t* zie Marie gisteren gegeven — O.CL in AgrS
S.CL-has-O.CL she M yesterday given
c. Z'ee zie *'t* Marie gisteren gegeven — O.CL in T
S.CL-has she O.CL M yesterday given
d. Z'ee zie Marie *'t* gisteren gegeven— O.CL in AgrO
S.CL-has she M O.CL yesterday given

An interesting property of the examples in (2b–d) is that they involve *clitic doubling* — the subject clitic *ze* is doubled by a full pronoun *zie*. Zwart takes this pronoun to occupy SpecTP in overt syntax (leaving unaddressed the question of why a subject pronoun doubling a clitic in AgrS is allowed (in fact, forced) to stay down in SpecTP while non-doubling subjects must move to Spec-AgrSP overtly). This being said, our earlier conclusion that regular subject-initial head clauses are no larger than AgrSP now dictates that the object clitic in (2b) must be right-adjoined to the head of AgrSP. This projection is thus once again

seen to be *head-initial*. The same holds for TP, as (2c) shows. Here the object clitic directly follows the doubling pronoun *zie* and finds itself to the immediate left of the indirect object *Marie*. Indirect objects, like direct objects, undergo overt-syntactic Case-checking movement to a SpecAgrOP position in Dutch, Zwart argues. In (2c), then, *'t* surfaces in a head position between SpecTP and SpecAgrOP — the obvious candidate is T, which, in view of surface word order in (2c), precedes its AgrOP complement in West Flemish. And finally there is (2d), which features the direct object clitic to the right of the indirect object NP. Clitics being generated as functional heads, (2d) illustrates that *'t* can show up under the head of a left-headed AgrO projection. All in all, then, the different placement possibilities of the object clitic in West Flemish (2) diagnose the functional structure in (3), where the direct object clitic (base-generated as a filler of AgrDO) can undergo optional upward movement to any of the higher functional heads (C in (2a), AgrS in (2b), T in (2c) and (at least potentially) AgrIO in (2d)).

(3)
$[_{CP}$ C $[_{AgrSP}$ AgrS $[_{TP}$ *zie* T $[_{AgrIOP}$ AgrIO $[_{AgrDOP}$ $[_{AgrDO}$ DO.CL] $[_{VP}$ SU V IO DO]]]]]]

The argument Zwart builds on (2) seems compelling, even though his disclaimer that "it is not clear what a minimalist theory of cliticization should look like" (p. 150) weakens its force. There is one obvious respect in which Zwart's account of clitic placement in West Flemish is disappointing — it must abandon Kayne's (1993) restrictive claim that *all* adjunction is *left*-adjunction. Zwart is led to conclude that when clitics move to higher F-heads and verbs move to clitics, they right-adjoin to their hosts, in apparent contradiction of Kayne's LCA. He himself is not entirely satisfied with this "somewhat puzzling result" (p. 157). But for apparently independent reasons (which remain mysterious), Chomsky (1994:31) has recently presented an intellectual exercise aimed at showing that there are ways of leaving open the direction of head-to-head adjunction, so perhaps we should not be too upset by this departure from strictest antisymmetry. Be that as it may, Zwart's account of clitic placement in West Flemish runs into more serious problems concerning its delicate interaction with the account of verb movement and functional head movement, presented in a separate section of chapter III.

Notice first that in (2c,d) the finite verb has moved to AgrS, apparently skipping the inflectional head positions intervening between its base position and its landing-site (T and AgrO). This is evident from the fact that, if T or AgrO hosts an object clitic, this clitic is not taken along by the verb moving to AgrS. V hence moves from its base position to its final resting place in one fell swoop in (2c,d). The same is true in an example like (4), where the position of the subject clitic shows that the verb cannot first have right-adjoined to AgrS (which hosts the subject clitic) on its way to Comp:

(4)
Gisteren eese/*z'ee zie 't gekocht
yesterday has-S.CL/S.CL-has she it(O.CL) bought

Why does the verb have to skip AgrS on its way to Comp? In order to be able to answer this question, we should first investigate the derivation of a V2 construction like (4) in some more detail.

Zwart argues, on the basis of an interesting analysis of an impressive range of West-Germanic *complementizer agreement* facts (facelifting and revising an earlier proposal by Hoekstra & Marácz 1989), that in West-Germanic AgrS undergoes so-called *functional head movement* to Comp. That is,

(5)
whenever there is a Comp, AgrS moves there *on its own* (i.e. without being accompanied by the verb).

Now, in V2 sentences like (4) the verb must ultimately end up in Comp. Its motive for moving there is the checking of its V-feature against that of AgrS in C. So the finite verb will adjoin to AgrS in C in (4). (This step must be taken in overt syntax, Zwart cleverly argues, *not* because AgrS's V-feature is strong (for otherwise it would be difficult to exclude overt-syntactic V-fronting in embedded clauses) but because of the strength of Comp's N-feature, which is to be checked against the topic's N-feature. I shall return to this argument below.) But now there is no need for the verb to touch down in AgrS's base position on its way up — it can accomplish V-feature checking more economically by moving to AgrS in C straightaway. For by the "fewest steps" requirement of economy of derivation (which Zwart preserves while rejecting the "shortest move" constraint), we expect to find a correlation between functional head movement and head-skipping verb movement, such that, as Zwart puts it:

(6)
"functional head movement takes place whenever verb movement is seen to skip functional heads" (p. 157).

This is a plausible position to take. But does it help us accommodate the word-order facts in (4)? I am afraid it does not. For no matter if V skips AgrS's base position on its way to Comp or not, the subject clitic, which Zwart assumes is *base-generated as* AgrS, will always find itself in Comp. This is a consequence of the application of functional head movement of Agr to C (cf. (5)), which, given its vital role in derivational economy ("fewest steps"), is a prerequisite for head-skipping V-movement to C. Right-adjoining to AgrS in Comp, the finite verb will inevitably end up to the immediate right of the subject clitic, regardless of what happened on the way from V to C.

Now one might suggest that Zwart is wrong in assuming that the verb adjoins to AgrS in C, and that instead the verb substitutes for C in topic-initial V2 constructions. With AgrS (containing the subject clitic) right-adjoined to C, this would yield the desired surface output; and V could still check AgrS's V-feature, as required, since it ends up in a sisterhood relationship with C-adjoined AgrS. This, then, might be a reasonable way out in the case of the subject clitic in (4) (although a non-trivial problem for such an approach would be that substitution of V for C would effectively obliterate the feature content of Comp).

But notice that (4) contains one other clitic — the object clitic *'t*, which demonstrably does not find itself in C, given that it is linearly separated from the subject clitic by the doubling pronoun *zie* (which occupies SpecTP; cf. above). This object clitic sits in either AgrO or T, no higher. The finite verb must hence have moved upwards skipping over the object clitic's host (cf. also (2c,d)). Now recall that Zwart assumes that "functional head movement takes place *whenever* verb movement is seen to skip functional heads" (cf. (6); italics added). So in (4) the AgrO-head must also have undergone functional head movement, for otherwise it could not have been skipped by verb move ment. And once AgrO moves to T, the object clitic (which is generated in AgrO) ends up in T, so that V will have to skip this head as well on its way to C. From (6) we then conclude that T must undergo functional head movement to AgrS (which itself undergoes further functional head movement to C). But then the object clitic will irrevocably end up to the left of the doubling pronoun *zie* in SpecTP. In general, if we take (6) seriously as a prerequisite for the application of head-skipping verb movement and combine it with Zwart's claim that clitics are generated as Agr-heads, the number of clitic positions in main clauses is reduced to precisely *one* — the highest position in the functional structure. Clearly, this is not the desired result.

What to do at this point? We could stick to (6) and abandon the idea that clitics are generated *as* functional (Agr) heads, assuming instead that clitics are base-generated in adjunction positions to Agr-heads. But then V-adjunction to an Agr-node hosting a clitic would result in multiple adjunction of a type that is not obviously allowed (not even under Zwart's 1993:34–35 modification of Kayne's 1993 proposals). Besides, an adjunction approach to clitic placement could get the facts to fall out right only if the clitic's host head could *excorporate* from the adjunction complex in the process of functional head movement. But a restrictive theory availing itself of head-skipping head movement should not at the same time allow for excorporation as well. And moreover, the type of excorporation needed in this case (viz. excorporation of the host) would be a theoretical anomaly if, as Kayne (1993, 10) assumes, "a segment cannot be antecedent governed", so that "a head to which a clitic (or other element) has adjoined cannot move up in such a way as to strand the clitic". Though Zwart departs from Kayne's assumptions with regard to the direction of head adjunction, this part icular part of the antisymmetry theory continues to be in effect on Zwart's assumptions (the difference between segments and projections that Zwart introduces on pp. 26–27 being inapplicable at the X^0 level, by definition.) As an alternative to the adjunction approach to clitics, we could forfeit the connection between head-skipping verb movement and independent functional head movement, codified in (6). But if we do that it becomes mysterious how the V-features of the skipped *in situ* F-heads could ever get checked, and we also essentially lose all (plausible) restrictions on the application of head-skipping verb movement, ending up with much too permissive a theory.

So it seems that the account of clitic placement in the West Flemish paradigm in (2) is seriously threatened by the introduction of head-skipping verb movement and its dependence on functional head movement later in the verb movement chapter. Although the two accounts have a natural relationship, they do not happily coalesce as ingredients of the theory of verb placement in the West-Germanic languages. Presumably, then, one of them should go. Which one? The analysis of clitic placement is instrumental in the argumentation for the head-initiality of the West-Germanic functional domain, and the idea of functional head movement of AgrS to C movement is the central ingredient of the elegant account of the West-Germanic complementizer agreement facts — both seem pretty much in dispensable, then. But the account of the root/non-root dichotomy in the West-Germanic asymmetric V2 languages built on the idea of AgrS-to-C movement does not accommodate the full array of facts, as I shall discuss in a moment. So perhaps this is a hint that this part of the analysis should come up for revision.

Recall first of all the trigger for *overt* verb movement to AgrS in C in non-subject-initial V2 constructions of the type in (4): the strength of Comp's N-feature. The idea is (see pp. 282–83 for fuller discussion) that as a result of functional head movement of AgrS to C (cf. (5)), C acquires a V-feature (viz. that of AgrS), and that as a result of acquiring a V-feature, C becomes [–accessible] — a novel concept introduced by Zwart. C being [–accessible], its N-feature cannot be transferred to C's projection. It thus threatens to remain unchecked against the topic's N-feature, given Zwart's highly attractive assumption that all feature checking obtains under sisterhood — a significant improvement over Chomsky's (1993) checking domains. In order for overt-syntactic checking of C's strong N-feature to succeed, the V-feature that C acquired as a consequence of AgrS-to-C movement should be eliminated prior to SPELL-OUT. This is accomplished by overtly raising the verb to AgrS in C. The strength of C's N-feature is thus responsible for overt-syntactic V-fronting to AgrS in C.

Since C's N-feature is strong in V2 languages, we now predict that in these languages, constructions in which SpecCP is overtly filled and AgrS-to-C movement obtains must *always* feature *overt* verb fronting in order to facilitate N-feature checking prior to SPELL-OUT. While this makes for an accurate account of V2 in non-subject-initial *main* clauses in Dutch and its dialects, this theory overgeneralizes in that it wrongly leads one to

expect overt-syntactic fronting of the finite verb in *embedded wh*-questions as well:

(7)
*Ik vraag me af wanneer /of/dat/ofdat-komt Jan vandaag
I wonder when COMP comes Jan today

The reason is that AgrS raises to C in embedded clauses just as in main clauses — in fact, it is precisely *embedded* clauses with complementizer agreement that initially motivated Zwart's AgrS-to-C hypothesis. AgrS thereby provides C with a V-feature which would seem to prevent N-feature checking against the *wh*-phrase in Spec-CP in the absence of overt-syntactic V-fronting to C. Zwart notes this problem (although he illustrates it with the wrong kind of example; see pp. 283–84), and suggests as "a way out" that "functional heads containing a lexical morpheme (such as a complementizer) are [+accessible] by definition" (p. 284). Clearly, though, given that C is assumed to be [+accessible] by definition anyway (p. 283; it is only AgrS-to-C raising that could interfere with this), this is a fairly pointless statement, which moreover puts an anticlimactic roof on the admirable edifice that had been constructed in the 100-odd pages leading up to it.

Sceptics might well capitalize on this, exploiting this property of lexical Cs to the full and saying that this is what "explains" Verb Second in general. That would make for an ostensibly much less cumbersome theory of Verb Second (where "less cumbersome" should not of course be taken to mean "simpler, more economical" a priori). They might then assume that what triggers overt-syntactic V-fronting to C in root clauses is the strength of C's V-feature, and that the fact that no V-fronting obtains in embedded clauses is due to a hypothesized property of lexical complementizers - their ability to check C's V-feature. Such an account would essentially be an updated variant of the traditional "generalized V2" approaches, according to which all root clauses (including the subject-initial ones, which also feature overt V-fronting) are analyzed as CPs.

Of course I am not suggesting here that we should follow this route; in fact, I am much more sympathetic to Zwart's approach to verb placement in asymmetric V2 languages, which manages to devise a non-stipulative analysis of a wider range of data than did the traditional approach (whose countless instantiations, in as many fancy ways, basically stipulated away the root/non-root dichotomy in the domain of overt verb movement). But Zwart's specific account of Verb Second is not entirely satisfactory. Moreover, as noted earlier, the concept of functional head movement around which it is centered is hard to reconcile with the analysis of clitic placement outlined in section 2 of chapter III. And finally, the overall theoretical frame into which the accounts of clitic and verb placement are cast, though certainly in the spirit of antisymmetric minimalism, vitally deviates from the straight and narrow antisymmetric and minimalist path. While strengthening minimalism by restricting feature-checking configurations to sisterhood and adding a potentially interesting locus of parametric variation in functional heads (viz. the [±accessible] parameter), Zwart substantially weakens the minimalist framework by abandoning Chomsky's theory of *locality* (built around the notions of "shortest move", equidistance and domain-extending head movement) and replacing it with no worked-out alternative. And Kayne's antisymmetry theory is remodeled beyond recognition, being reduced to a standard minimalist (i.e. extended *Barriers* type) tree structure in which all heads precede their complements and in which rightward movement is disallowed, and thereby being robbed of many of the far-reaching and exciting consequences that Kayne's original proposal leads to.

All this amounts to saying that, although Zwart's monumental case study is decidedly an important step into the right direction, reaching a higher level of descriptive adequacy in some domains than did previous approaches, it will still be quite some time before we can comfortably conclude that generative grammar has grasped the syntax of Dutch. But that's no news, of course.

References

den Besten, H. (1977). On the interaction of root transformations and lexical deletive rules. Ms., Universiteit van Amsterdam [Published in Den Besten (1989), *Studies in West Germanic syntax*. Diss., Katholieke Universiteit Brabant.

Chomsky, N. (1993). A minimalist program for linguistic theory. In *The view from Building 20*, K. Hale & S.J. Keyser (eds.), 1–52. Cam bridge, Mass.: MIT Press.

Chomsky, N. (1994). Bare phrase structure. *MIT Occasional Papers in Linguistics* 5.

Gärtner, H.-M. & M. Steinbach (1994). Economy, Verb Second and the SVO-SOV distinction. *Working Papers in Scandinavian Syntax* 53, 1–59.

Hoekstra, J. & L. Marácz (1989). On the position of inflection in West Germanic. *Working Papers in Scandinavian Syntax* 44, 75–88.

Kayne, R. (1991). Romance clitics, verb movement, and PRO. *Linguistic Inquiry* 22, 647–86.

Kayne, R. (1993). *The antisymmetry of syntax*. Ms., CUNY Graduate Center.

Koster, J. (1975). Dutch as an SOV language. *Linguistic Analysis* 1, 111–36.

Rizzi, L. (1991). *Proper head government and the definition of A-positions*. Paper presented at GLOW Leiden.

Travis, L. (1984). *Parameters and effects of word order variation*. Diss., MIT.

Zwart, C.J.W. (1994). The minimalist program and Germanic syntax. A reply to Gärtner and Steinbach. *Working Papers in Scandinavian Syntax* 54, 1–35.

LANGUAGE ACQUISITION, METRICAL THEORY, AND OPTIMALITY

A STUDY OF DUTCH WORD STRESS

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Summary *by the author*

The aim of this thesis is to enrich our understanding of Dutch word stress, and through that, gain insight into the nature of the components of universal theory that deal with stress systems.

One of the most striking and interesting features of the complicated Dutch word stress system is the notion of the relative markedness of patterns, which has motivated some researchers to state that Dutch has a "mixed" stress system. Dutch may be said to have fairly predictable primary stress, i.e., it occurs within the three-syllable domain at the right edge of words and is distributed there in a quantity-sensitive fashion. However, the language does tolerate lexical variation, and stress patterns may vary within certain limits. Various sources of empirical evidence have served to draw a growingly accurate description of the markedness hierarchy found in Dutch: lexical frequencies, stress vacillations, and stress patterns in loan words, neologisms and acronyms. In this dissertation, we use nonsense words to investigate the relative markedness of Dutch stress patterns. In particular, stress data from child language are involved.

Our data are collected by means of a methodological approach which is similar to the one adopted by Hochberg (1986, 1988) in her study of Spanish stress acquisition. Productions of familiar meaningful words and imitations of novel words contrasting in (main) stress positions are elicited from three-year-old and four-year-old children, all native speakers of Dutch. A key hypothesis is that there is a close relationship between the ease of production of words and their status (regular, irregular, or prohibited), and that errors in the children's realizations should move in the direction of comparatively unmarked patterns.

The metrical analyses of Dutch stress developed by Kager (1989) and Trommelen & Zonneveld (1989) provide a hierarchical categorization of the relative markedness of stress patterns. In these analyses, stress patterns are generated by a set of metrical parameters. Regular cases (type A) are characterised as unmarked, whereas exceptional cases require lexical markings. Cumulation of idiosyncrasies reflects degrees of markedness. Therefore, irregular patterns fall into two classes: those that are marked with one single peripheral exception feature (type B) and those that carry two exception features or a non-peripheral exception feature (type C). So, given the fact that the language is trochaic, quantity-sensitive (with "closed" syllables counting as heavy), and has extrametricality of heavy syllables, we have the following data to match the types. A: penultimate stress if the final syllable is open (e.g., *pyjáma*, *Aláska*); (ante)penultimate stress if the final syllable is closed (e.g., *báriton*, *Gibráltar*); final stress if the final syllable is superheavy (e.g., *presidént*); B: *Pánama*, *pelotón*, *ólifant*; C: *chocolá*, *Celébes*, *Prométheus*. An important motivation for carrying out the experimental research of this thesis is to collect new empirical data from child language to evaluate this hierarchical categorization of the relative markedness of stress types.

In our child language data, we test two predictions. The first prediction is that words with marked stress patterns (types B and C) should cause more difficulty than their regular counterparts (type A). The second prediction is that errors in productions usually involve a tendency to regularise the stress pattern. Important insights into the nature of Dutch stress are gained by taking into account the distribution and frequency of errors among word categories and stress types in the child data, the nature of errors made, and their implications for stress status.

Children's imitations of nonsense words provide significant support for our hypothesis. The ease of imitation of stimuli follows the hierarchy of regularity predicted by the metrical theory. Children find words with irregular and prohibited stress more difficult to imitate than words with regular stress. Furthermore, the analysis of the