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° , and X° precedes ZP.

$$\begin{array}{cccc} & & & XP & & & \\ & & YP & & XP & & \\ & & & X^{\circ} & & ZP & & \end{array}$$

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° but by the combination of X° and ZP, XP. This XP is called the *Projection* of X° (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° 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° 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:

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(5) a. Jan ging waarschijnlijk weg
John went probably away
b. * Jan waarschijnlijk ging weg
John probably went away
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In embedded clauses in Dutch, the verb does not move to AgrS:

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

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

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

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

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

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 whmovement 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).

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