

# CLITICS, SCRAMBLING, AND HEAD MOVEMENT IN DUTCH

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In Zwicky's 1977 discussion of clitics from the point of view of generative syntax, three classes of clitics are distinguished: *simple clitics*, *special clitics*, and *bound words*.

*Bound words* are unaccented bound morphemes that can be associated with a variety of hosts, like Latin *-que*. We will ignore them in this paper. *Simple clitics* are phonologically reduced free morphemes that show no special syntax, like English *'im* in (1).

(1) I can't stand'im [stænm]

*Special clitics* are unaccented bound forms that act as variants of stressed free forms, and show special syntax, like French *le* in (2).

(2) Je le vois  
I him see

Simple clitics and special clitics are sometimes difficult to tell apart. Simple clitics obviously result from phonological reduction, as in casual speech. Accordingly, in (1) the clitic can be replaced by an unreduced variant:

(3) I can't stand him [stænd him]

But special clitics are often morphologically related to unreduced variants as well, as in French *le* and *lui*. In that case, they may be analyzed as simple clitics that have achieved a special syntactic status in some way (Zwicky 1977:6). Accordingly, the clitic in (2) cannot be replaced by its full variant:

(4) \* Je lui vois  
I him see

Thus, the behavior of simple clitics is to be described in phonological terms, whereas the behavior of special clitics is to be described in terms of syntax.

The weak pronouns in Dutch are obviously morphologically related to the corresponding strong variants. The question arises whether these weak pronouns in addition show special syntax.

In this paper I will argue that they do, and that as a result they should be considered special clitics, rather than simple clitics, in the terminology of Zwicky (1977).

I will also compare the Dutch clitics with the clitics in French, explaining away certain obvious differences, such as the possibility for clitics to license parasitic gaps in Dutch, and the apparent clitic stranding under verb movement in Dutch.

The paper presents an analysis of Dutch weak pronouns as special clitics which is in keeping with the assumptions on phrase structure and conditions on movement of the minimalist approach to syntax (Chomsky 1992). It also supports the analysis of clitic constructions in Sportiche (1992), in which clitics are generated as

heads and may undergo head movement. I will propose a reformulation of the Head Movement Constraint (Travis 1984, Chomsky 1986) in minimalist terms, which will under certain conditions allow the verb to skip the head position occupied by the clitic.

## 1. Dutch Pronouns

Dutch has sets of strong and weak subject and object pronouns (Koster 1978, Berendsen 1986, Everaert 1986, Zwart 1991a).<sup>1</sup>

### (5) *Strong subject pronouns*

1SG	ik	1PL	wij
2SG	jij	2SG	jullie
3SG	hij/zij	3SG	zij

### (6) *Weak subject pronouns*

1SG	'k	1PL	we
2SG	je	2PL	-
3SG	ie/ze/'t	3PL	ze

### (7) *Strong object pronouns*

1SG	mij	1PL	ons
2SG	jou	2PL	jullie
3SG	hem/haar	3PL	hen, hun

### (8) *Weak object pronouns*

1SG	me	1PL	-
2SG	je	2PL	-
3SG	'm/'r/'t	3PL	ze

The question arises whether the weak pronouns in (6) and (8) should be regarded as simple clitics or as special clitics. This is the question that will be discussed in this paper.

The basic facts concerning the distribution of the weak pronouns in Dutch are the following.

In main clauses in Dutch, the finite verb is always in the position of the second constituent. The first constituent may be a subject, an object, or an adjunct:

- (9) a. Marie heeft dat boek gisteren gelezen  
 Mary has that book yesterday read  
 "Mary read the book yesterday."  
 b. Dat boek heeft Marie gisteren gelezen  
 that book has Mary yesterday read  
 "Mary read that book yesterday."  
 c. Gisteren heeft Marie dat boek gelezen

yesterday has Mary that book read  
 "Mary read that book yesterday."

Weak subject pronouns, with the exception of the masculine 3SG pronoun *ie*, may appear as the first constituent in the main clause. Weak object pronouns may never precede the finite verb in main clauses:

- (10) a. Ze/\*le heeft 't gisteren gelezen  
 she/he has it yesterday read  
 "She/he read that book yesterday."  
 b. \* 't heeft ze/ie gisteren gelezen  
 it has she/he yesterday read

In cases of subject-verb inversion, like (9c), the subject and the verb may be separated by an adverb (11a), but not if the subject is a weak pronoun (11b):

- (11) a. Toch heeft gisteren Marie dat boek gelezen  
 yet has yesterday Mary that book read  
 "Nevertheless, Mary read that book yesterday."  
 b. \* Toch heeft gisteren ze dat boek gelezen  
 yet has yesterday she that book read

Similarly, weak objects have to appear to the immediate right of the finite verb (cf. (10a)), unlike full objects:

- (12) a. Marie heeft gisteren dat boek gelezen  
 Mary has yesterday that book read  
 "Mary read that book yesterday."  
 b. ?? Marie heeft gisteren 't gelezen  
 Mary has yesterday it read

In embedded clauses in Dutch, the finite verb appears in a sentence-final position, to be followed only by adjuncts and CPs (which are traditionally analyzed as having undergone extraposition). If the embedded clause has more than one verb, the verbs appear in a cluster:

- (13) a. dat Marie dat boek leest (in de tuin)  
 that Mary that book reads in the garden  
 "that Mary is reading that book (in the garden)."  
 b. dat Marie dat boek gelezen heeft  
 that Mary that book read has  
 "that Mary read that book."

This cluster of verbs also shows up if the embedded clause contains an Exceptional Casemarking (ECM) construction:

- (14) dat Jan Marie dat boek zag lezen  
 that John Mary that book saw read  
 "that John saw Mary read that book."

Weak subjects in embedded clauses appear to the immediate right of the complementizer:

- (15) a.            dat    gisteren        Marie   dat boek        zat te lezen  
                   that   yesterday     Mary   that book        sat to read  
                   "that Mary was reading that book yesterday."  
       b.            dat    (\*gisteren)    ze     dat boek        zat te lezen  
                   that   yesterday     she    that book        sat to read

Weak objects in embedded clauses appear to the immediate right of the subject:

- (16) a.            dat    Marie   gisteren        dat boek        zat te lezen  
                   that    Mary   yesterday     that book        sat to read  
                   "that Mary was reading that book yesterday."  
       b.            dat    Marie   (\*gisteren)    't        zat te lezen  
                   that    Mary   yesterday     it        sat to read

In ECM constructions, a weak object of the most deeply embedded clause may appear to the immediate right of the subject of the most deeply embedded clause, or to the immediate right of the subject of the ECM-verb:

- (17) a.            dat    Jan    Marie   't        zag lezen  
                   that   John   Mary   it        saw read  
                   "that John saw Mary read it."  
       b.            dat    Jan    't        Marie   zag lezen  
                   that   John   it        Mary   saw read  
                   "that John saw Mary read it."

The latter option is not available to full objects (cf. (14)):

- (18)            \*            dat    Jan    het boek        Marie   zag lezen  
                                   that   John   the book        Mary   saw read

I will argue below that this difference between full objects and weak objects shows that the latter are special clitics in the sense of Zwicky (1977).

Before turning to this argumentation, however, we have to consider the possibility that the weak pronouns in Dutch are the mere result of phonological reduction rules (section 2), as well as other tests that have been proposed to identify special clitics (section 3).

## 2. Against Phonological Reduction

The weak forms of the Dutch pronouns are apparently morphologically related to the strong forms.<sup>2</sup> However, as Berendsen (1986) shows, the weak forms are not derived from the strong forms by productive phonological processes.

Berendsen (1986) also demonstrates that weak pronouns may have a specialized meaning which the strong pronouns lack.

Thus, the weak forms of the 2SG and 3PL pronouns may have a generic interpretation ('people'), but the corresponding strong forms may not.

- (19) a. Ze zeggen zoveel  
 they say somuch  
 "They/people say a lot"
- b. Zij zeggen zoveel  
 they say somuch  
 "They/\*people say a lot"
- (20) a. Je leeft maar één keer  
 you live but one time  
 "You(addressee)/you(people) only live once"
- b. Jij leeft maar één keer  
 you live but one time  
 "You(addressee)/\*you(people) only live once"

Similarly, the weak 3PL pronouns (both subject and object) can be used to refer to both persons and things, whereas the strong 3PL pronouns can only be used to refer to persons (cf. Kayne 1975:86).<sup>3</sup>

- (21) a. Ze/\*zij zijn uit voorraad  
 they are out of stock
- b. Ik heb ze/\*hen gerepareerd  
 I have them repaired  
 "I repaired them"

Similarly, Berendsen (1986) shows that in 1SG and 2SG only weak pronouns are used as SE-anaphora (in the terminology of Reinhart & Reuland 1991).<sup>4</sup> Thus:

- (22) a. Ik schaam me/??mij  
 "I'm ashamed."
- b. Jij schaamt je/\*jou  
 "You're ashamed."

If the weak pronouns are phonologically reduced forms of strong pronouns, this syntactic specialization of the weak pronouns is unexpected.

Berendsen (1986) also notes that certain idiomatic expressions involving pronouns allow only the weak form.<sup>5</sup>

- (23) a. Daar gaat ie/\*hij  
 there goes he  
 "Here goes."
- b. Daar kun je/\*jij donder op zeggen  
 there can you thunder on say  
 "You can bet your bottom dollar."

Berendsen's argues that this shows that the form of the weak pronouns is not due to productive phonological reduction rules. Assuming that idiomatic expressions are stored in the Lexicon, then in a phonological reduction analysis the pronouns in

the idiomatic expressions ought to have a "rather peculiar feature [obligatory reduction]" (*op. cit.* p.40). In a lexical storage analysis the weak pronouns are available from the outset and no feature specification is needed. Since the feature [obligatory reduction] is *ad hoc*, the lexical storage analysis must be preferred.

This argument is not entirely satisfactory, because idioms may be stored in the Lexicon *as phrases* (cf. Di Sciullo & Williams 1987). If idiomatic expressions for some reason are *acquired* with the pronouns in reduced form, then the fact that they are always *used* with the pronouns in reduced form does not imply that weak pronouns are independently stored in the Lexicon.<sup>6</sup>

In sum, however, Berendsen's arguments seem to show that the weak pronouns in Dutch are listed in the Lexicon as separate forms of the pronouns.

This forms the first piece of evidence that the weak pronouns in Dutch are special clitics rather than simple clitics.

### 3. Heads or Phrases

Baltin (1982), building on earlier work by, among others, Kayne (1975:81ff), argues that clitics are heads ('lexical nodes' in his terminology, Baltin 1982:4).

The standard arguments to show this are that clitics cannot be modified, conjoined, or used in isolation. Consider the following examples from French (Kayne 1975).

- (24) a. Ne tue qu'eux deux  
 NEG kill than THEY two  
 "Kill only the two of them."  
 b. Tue-les (\*deux)  
 Kill them two

- (25) a. Tue Jean et Marie  
 "Kill John and Mary."  
 b. Tue-le (\*et la)  
 "Kill him and her."

- (26) Q Qui as-tu vu?  
 A Lui/\*Le  
 "Who did you see?" -- "Him."

In Dutch, the weak pronouns cannot be modified, conjoined, and used in isolation, whereas the strong pronouns can (Koster 1978, Everaert 1986).

- (27) a. Dood hen tweeën  
 Kill them two  
 b. Dood ze (\*tweeën)

- (28) a. Dood hem en haar  
 Kill him and her  
 b. Dood 'm (\*en 'r)

- (29) Q           Wie heb je gezien?  
 A           Hem/\*'m

"Who did you see?" -- "Him."

Kayne (1975:82) in addition shows that French weak pronouns cannot be contrastively stressed.

- (30)           Je     la/\*LA préfère  
           I     her    prefer

This is true of the weak pronouns in Dutch as well.

- (31)           Ik     wil     je/\*JE/JOU  
           I     want    you

However, reduced pronouns in English (assuming these to be 'simple clitics' in Zwicky's terminology) cannot bear contrastive stress either.

- (32)           I want ya/\*YA/YOU

In other words, this test does not distinguish special clitics from simple clitics.

Similarly, the tests involving modification, conjunction, and use in isolation do not allow us to draw the line between simple clitics and special clitics either. Cf. the following examples involving reduced pronouns in English.

- (33) a.           Kill him over there [=that man over there]  
       b.           Kill'm (\*over there)

- (34) a.           Kill him and her  
       b.           Kill'm (\*and 'r)

- (35) Q           Who did you see?  
 A           Him/\*'m

Thus, the tests for clitic status involving stress, modification, coordination, and use in isolation generalize over simple clitics (phonologically reduced pronouns) and special clitics (weak pronouns with special syntax).

This is also true of another test for clitic status mentioned in Everaert (1986) in connection with Dutch weak pronouns, viz. the impossibility of topicalization (Koster 1978, Travis 1984).

- (36)           Hem/\*'m     zie ik  
           him           see I  
           "Him, I see."

Again this does not obviously identify weak pronouns as clitics, since reduced pronouns in English cannot be topicalized either.

- (37)           Him/\*im I like

The tests discussed in this section are generally taken to suggest that weak pronouns are heads, rather than phrases. But the fact that weak pronouns cannot be stressed, modified, conjoined, used in isolation, or topicalized appears to be related to their status as 'weak' elements, since the English reduced pronouns behave exactly like special clitics in these tests.<sup>7</sup>

Nevertheless, it may very well turn out to be the case that the weak pronouns in French and Dutch are heads rather than phrases. However, this should be decided on the basis of word order phenomena, if it could be shown that the weak pronouns occupy positions that are not available to full noun phrases (preferably, positions that can independently be identified as head positions). This type of evidence will be discussed in the next two sections.

To conclude, the tests discussed in this section do not allow us to draw a line between simple clitics and special clitics. Therefore they do not help us to determine the exact status of the weak pronouns in Dutch.

In the next two sections, evidence from word order will be examined. For reasons of space, I will limit the discussion to object pronouns.

#### 4. Word Order

The weak object pronouns in French occupy positions that full noun phrases cannot occupy.

- (38) a. Je le/\*Pierre vois  
I him/Pete see
- b. Je vois Pierre/\*le  
I see Pete/him  
"I see him/Pete."
- (39) a. L'/\*Pierre as-tu vu ?  
him/Pete have you seen
- b. As-tu vu Pierre/\*le ?  
Have you seen Pete/him  
"Have you seen him/Pete?"
- (40) a. Le/\*Pierre voir serait dangereux  
him/Pete see would be dangerous
- b. Voir Pierre/\*le serait dangereux  
see Pete/him would be dangerous  
"To see him/Pete would be dangerous."

Kayne (1975) argues that the weak pronouns differ from the full noun phrases in that they are adjoined to V. On the assumption that only heads can adjoin to heads (Baltin 1982, Chomsky 1986), this would effectively identify the French weak pronouns as heads. As heads, these weak pronouns would have a special syntactic status, and therefore fall in the category of special clitics.

As has been argued before (Zwart 1991a, see also Jaspers 1989, Haegeman 1991), there are certain constructions in Dutch in which it is possible to show that weak pronouns and full noun phrases occupy different positions.





object of the matrix verb, must be licensed in the Spec,AgrO of the matrix verb (Vanden Wyngaerd 1989b).<sup>12</sup> In the example sentence (41a), therefore, there must be two AgrOPs. *haar* then occupies the higher Spec,AgrO, and *de afwas* occupies a lower Spec,AgrO.<sup>13</sup>

Now we are in a position to determine whether the weak pronoun *'t* in (41a) would occupy the same position as *de afwas*, namely the Spec position of the lower AgrO.

Consider (41b). The direct object of the embedded clause, *de afwas* must be formally licensed in a Spec,AgrO. The higher Spec,AgrO is occupied by the subject of the embedded clause, *haar*. Therefore this position is not available, and the object of the embedded clause is licensed in the lower Spec,AgrO. Apparently, there cannot be a third Spec,AgrO between the AgrSP (where the subject *ik* is) and the higher AgrOP (where the embedded subject *haar* is). If there were such an additional AgrOP, we would expect the full object *de afwas* 'the dishes' to be able to occupy it, so that it would appear between the matrix subject *ik* 'I' and the embedded subject *haar* 'her', contrary to fact.

However, the weak pronoun *'t* (the object of the embedded clause in (41a)) is allowed to move across the embedded subject in the higher Spec,AgrO, *haar* 'her'. Since, as we have just seen, there cannot be a third AgrOP between the AgrSP and the higher AgrOP is occupied, this movement appears to be directed to a completely different kind of position. This, then, would have to be a movement of a different type than movement of a phrasal noun phrase.

If the weak pronoun does not move to a Spec,AgrO in (41b), then the optimal assumption is that it does not move to a Spec,AgrO in (41a) either. Thus, in (41a) *'t* and *de afwas* only apparently occupy the same position.

Here we have the kind of evidence that allows us to conclude that the weak pronouns in Dutch are special clitics rather than simple clitics. As in French, the weak pronouns occupy a position which is not available to full noun phrases. In the rest of this paper, I will pursue an analysis of Dutch weak pronouns which follows Kayne (1975, 1991) in assuming that the position occupied by clitics is a head position -- of as yet unclear identity.<sup>14</sup>

## 5. More Word Order Phenomena.

### 5.1 Scrambling

Consider again the scrambling paradigm in (42), where a phrasal direct object may appear both to the left and to the right of the sentence adverb *gisteren*.

- |      |    |      |      |                                      |           |               |
|------|----|------|------|--------------------------------------|-----------|---------------|
| (42) | a. | dat  | Jan  | gisteren                             | het boek  | gelezen heeft |
|      |    | that | John | yesterday                            | the book  | read has      |
|      | b. | dat  | Jan  | het boek                             | gisteren  | gelezen heeft |
|      |    | that | John | the book                             | yesterday | read has      |
|      |    |      |      | "that John read the book yesterday." |           |               |

If the phrasal direct object is replaced by a weak pronoun, it can only appear to the left of the sentence adverb (Koster 1978:14).

- (44) a. \*        dat    Jan    gisteren    't        gelezen heeft  
                   that    John   yesterday    it        read has
- b.        dat    Jan    't        gisteren    gelezen heeft  
                   that    John   it        yesterday    read has  
                   "that John read it yesterday"

Let us assume, as before, that scrambling is in fact obligatory movement of the direct object to Spec,AgrO, and that adverbs may be base generated in various positions. Then the ungrammaticality of (44a) shows that the weak pronoun is not allowed to move to Spec,AgrO. Instead, it has to move on, crossing the sentence adverb.

This once again shows that weak pronouns in Dutch have a special syntactic status. Assuming that they are heads, we must conclude from (44) that the weak object pronouns are adjoined to a head position that cannot be separated from the subject by an adverb.<sup>15</sup>

In the phrase structure adopted here (cf. note 12) there are two head positions available to host the weak pronoun, T and AgrS. However, more functional heads may be present in the structure (such as Neg, cf. Haegeman 1992a, Zanuttini 1991). At this point I will not proceed to demonstrate which one of these heads can be shown to host the weak pronoun. As a working hypothesis, I will adopt the position that the Dutch object clitics are hosted by AgrS (as in Jaspers 1989). As has been argued in Zwart (1991a, 1991b, 1993a), AgrS is the position occupied by the finite verb in subject initial main clauses in Dutch. Accepting this, (45) shows that the subject and the AgrS position cannot be separated by adverbial elements.

- (45)                    Jan    (\*gisteren)    heeft    het boek    gelezen  
                           John   yesterday    has    the book    read  
                           "John read the book yesterday."

Hence, if the weak object pronoun in (44) adjoins to AgrS, the ungrammaticality of (44a) follows from whatever explains the ungrammaticality of (45).

This approach predicts that if the sentence adverb precedes the subject, as in (43a), the phrasal object can be replaced by a weak pronoun. This prediction is borne out.

- (46)                    dat    gisteren    Jan    't        gelezen heeft  
                           that    yesterday    John   it        read has

Consider finally a peculiar fact concerning weak pronouns and scrambling, not present in all dialects of Dutch.<sup>16</sup> As mentioned above in note 10, indefinite objects in Dutch must be assumed to also move to Spec,AgrO. However, if they end up to the left of a sentence adverbial, the indefinite noun phrase receives a specific reading (see De Hoop 1992 for a recent discussion).

- (47) a.            dat    ik        vaak    meisjes        kus  
                   that    I        often    girls            kiss  
                   "that it is often the case that I kiss girls"
- b.            dat    ik        meisjes        vaak    kus  
                   that    I        girls            often    kiss  
                   "that I kiss girls more than once"

In (47a), the number of kisses given to each girl is not expressed, whereas (47b) has a reading in which every time I kiss a girl I kiss her more than once. In addition, (47b) has a generic reading of the indefinite object noun phrase, which (47a) lacks. The additional readings in (47b), I assume, are an effect of the hierarchical ordering of the indefinite noun phrase over the sentence adverb, and the absence of these readings in (47a) is determined by the inverse hierarchical ordering of the adverb and the indefinite object in that sentence. Crucially, nothing in the paradigm in (47) indicates that the *absolute* position of the indefinite object is not the same in the two constructions.<sup>17</sup>

Now in the relevant dialects indefinite plural noun phrases can be replaced by a weak pronoun 'r.<sup>18</sup> This pronoun has to precede the sentence adverbial.

- (48) a.        \*            dat    ik        vaak    'r        kus  
                   that    I        often    cl.        kiss
- b.            dat    ik        'r        vaak    kus  
                   that    I        cl.        often    kiss

In this respect, 'r behaves exactly like the weak object pronouns of Standard Dutch discussed above.

But, crucially, (48b) has both the reading of (47a) and the reading of (47b), with a clear preference for the reading of (47a). Thus, scopal relations appear to be determined on the basis of linear (or hierarchical) order where full noun phrases are concerned, but not where weak pronouns are concerned. This is unexpected if weak pronouns do not have a special syntactic status.

## 5.2 Double Object Constructions

Dutch double object constructions show the so-called *dative alternation*: the indirect object can be expressed in a noun phrase or in a PP.

- (49) a.            dat    ik        Marie    het boek        gegeven heb  
                   that    I        Mary    the book        given have  
                   "that I gave Mary the book"
- b.            dat    ik        het boek        aan Marie        gegeven heb  
                   that    I        the book        to Mary        given have  
                   "that I gave the book to Mary"

Let us first consider the prepositionless variant.

The order of the two noun phrases *Marie* 'Mary' and *het boek* 'the book' is fixed.<sup>19</sup>

(50)            ??     dat    ik     het boek     Marie gegeven heb  
                          that    I     the book     Mary    given have

Moreover, as discussed in Den Dikken & Mulder (1991), the order of the two noun phrases remains fixed even when both noun phrases appear to the left of the sentence adverb ('scrambling').

(51) a.            dat ik gisteren     Marie het boek     gegeven heb  
                          that I yesterday    Mary the book     given have  
       b.            ??     dat ik gisteren     het boek Marie     gegeven heb  
                          that I yesterday    the book Mary     given have

(52) a.            dat ik Marie het boek     gisteren     gegeven heb  
                          that I Mary the book     yesterday    given have  
       b.            ??     dat ik het boek Marie     gisteren     gegeven heb  
                          that I the book Mary     yesterday    given have

As Den Dikken & Mulder (1991) note, movement of both objects across the adverbial would yield non-nesting paths (from each antecedent to its trace), in violation of Pesetsky's (1982) Path Containment Condition.<sup>20</sup>

However, if our analysis of scrambling is correct, the adverb must be generated in different positions in (51) and (52), and (52) is not derived from (51) by raising of the two objects. Since (51) and (52) are not related by movement, no Path Containment Condition violation occurs.<sup>21</sup>

Thus, the fixed word order in (52) reduces to whatever explains the fixed word order in (50) and (51).

Notice now, that if the direct object and the indirect object are weak pronouns, the preferred word order is reversed.

(53) a.            ?     dat    ik     'r 't     gegeven heb  
                          that    I     her it    given have  
       b.            dat    ik     't 'r     gegeven heb  
                          that    I     it her    given have

As before, the weak pronouns cannot appear to the right of sentence adverbs.

(54) a.            ??     dat    ik     gisteren     't 'r     gegeven heb  
                          that    I     yesterday    it her    given have  
       b.            dat    ik     't 'r     gisteren     gegeven heb  
                          that    I     it her    yesterday    given have

The contrast between (53b) and (50) is unexpected if weak pronouns are full noun phrases. The ungrammaticality of (54a) again suggests that the weak pronouns are special clitics, moving to a position to the left of the formal licensing position of full noun phrases.

We now expect double object clitics to be able to appear to the left of the embedded subject in Exceptional Case Marking constructions. This is indeed the case:

- (55) a.            dat    ik        Piet    't 'r    heb zien geven  
                   that    I        Pete    it her    have see give  
                   b.            dat    ik        't 'r    Piet    heb zien geven  
                   that    I        it her    Pete    have see give  
                   "that I saw Pete give it (to) her"

Consider next the prepositional dative variant of the double object construction ((49b)).

- (49) b.            dat    ik        het boek        aan Marie        gegeven heb  
                   that    I        the book        to Mary        given have  
                   "that I gave the book to Mary"

The preposition *aan* cannot be left out in (49b), as this would yield the two noun phrases in DO-IO order (as in (50)).

- (50)            ??    dat    ik        het boek Marie        gegeven heb  
                   that    I        the book Mary        given have

However, if the direct object in (50) is a weak pronoun, the sentence is fine.

- (56)            dat    ik        't        Marie gegeven heb  
                   that    I        it        Mary given have

If weak pronouns and full noun phrases had the same status, the contrast between (50) and (56) would be unexpected.

On the other hand, if weak pronouns have a different status from full noun phrases, in that weak pronouns move to a head position, to the left of the position where phrasal noun phrase objects are licensed, the contrast between (50) and (56) is exactly as we expect.

If *'t* in (56) is a special clitic and moves to a head position, (56) is not derivationally related to (50) but to (49a).

- (49) a.            dat    ik        Marie het boek        gegeven heb  
                   that    I        Mary the book        given have  
                   "that I gave Mary the book"

As (57) shows, the head position the clitic moves to must be to the left of the overt syntax position of the prepositionless Indirect Object.<sup>22</sup>

- (57)            ??    dat    ik        Marie 't        gegeven heb  
                   that    I        Mary it        given have

Summarizing, the distribution of weak pronouns in double object constructions strongly suggests that they are not full noun phrases.

### 5.3 Conclusion

The behavior of weak pronouns in Dutch scrambling and double object constructions confirms the conclusion reached in section 4, namely that the Dutch weak pronouns are not full noun phrases and move to a position to the left of AgrOP.

This concludes our investigation of the status of weak object pronouns in Dutch. It turns out that they show a special syntax compared to phrasal object noun phrases. Therefore, they should be considered special clitics rather than simple clitics, in the terminology of Zwicky (1977).

In the next section, I will discuss certain differences between object clitics in Dutch and in French.

## 6. Certain Differences Between Dutch and French Clitics

Even if the weak pronouns in both French and Dutch are properly identified as special clitics, there are certain syntactic differences between them that need to be explained.

In particular, object clitics in French remain adjoined to the verb in questions involving subject-verb inversion.

(58) Tu l'as vu  
you it have seen  
"You've seen it."

(59) a. \* As-tu le vu?  
have you it seen  
b. L'as-tu vu?  
it have you seen  
"Did you see it?"

In Dutch, the object clitic stays behind in constructions of subject-verb inversion.

(60) Je hebt't gezien  
you have it seen  
"You've seen it."

(61) a. Heb je 't gezien?  
have you it seen  
"Did you see it?"  
b. \* Heb 't je gezien?  
have it you seen

Secondly, object clitics in French do not license parasitic gaps.

(62) \* Je l' ai retourné t sans finir e  
I it have returned without finishing pg

On the other hand, Dutch object clitics do license parasitic gaps.<sup>23</sup>

- (63)                    dat ik t                zonder e uit te lezen t                weggelegd heb  
                           that I it                without pg out to read                away-put have  
                           "that I put it aside without finishing (it)."

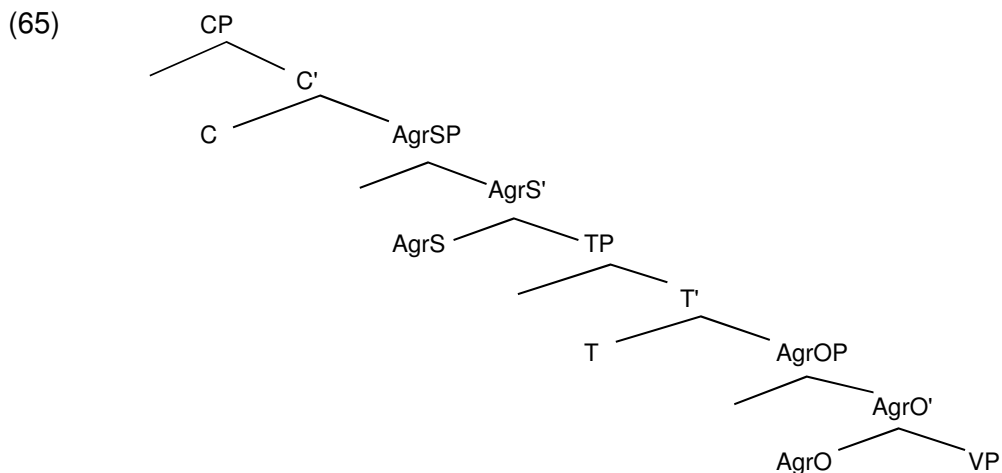
In this respect the Dutch object clitics behave like full noun phrases.

- (64)                    dat ik het boek zonder e uit te lezen t weggelegd heb  
                           "that I put the book aside without finishing (it)."

These two differences will be treated in separate sections.

## 6.1 Head Movement

Let us assume that French and Dutch are maximally similar, in that the functional domain in both languages has the structure in note 12, repeated here as (65), and that in both languages the verb occupies the AgrS position in subjectinitial main clauses.<sup>24</sup>



In the same spirit, let us assume that the object clitics in both French and Dutch are adjoined to AgrS, to the left in French (Kayne 1991), to the right in Dutch.<sup>25</sup>

Finally, let us assume that in both French and Dutch the verb moves to C in inversion constructions like wh-questions and the yes/no-questions in (59), (61).<sup>26</sup>

I will now argue that movement of the verb to C in Dutch skips AgrS. As a result, the clitic, hosted by AgrS, will not move along with the verb to C.

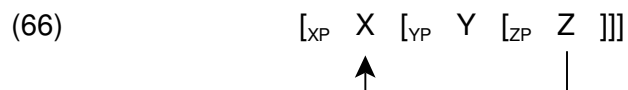
Since Travis (1984) it is assumed that verb movement (as an instance of head movement) is constrained by the Head Movement Constraint, which states that head positions cannot be skipped in the process of head movement.

The Head Movement Constraint can be reformulated as a condition on traces of head movement, hence as an instance of the more general Empty Category Principle (Travis 1984:133, Baker 1988), which states that empty categories must be properly governed (Chomsky 1981).



For traces of head movement, proper government reduces to antecedent government (Chomsky 1986:69), which applies if no barrier intervenes between a trace and its antecedent (where each link in the chain of the moved element and its traces links an antecedent and a trace).

Chomsky (1986:70) argues that for head movement phenomena, two types of barriers are relevant. Consider a case of non-local head movement, illustrated in (66).



The movement of  $Z$  to  $X$  across  $Y$  in (66) crosses two maximal projections,  $ZP$  and  $YP$ .  $ZP$  will be a barrier for the antecedent government relation between  $X$  and  $Z$  if  $Y$  does not L-mark  $ZP$ .<sup>27</sup>  $YP$  (or  $Y$ ) will always be a barrier for the antecedent government relation between  $X$  and  $Z$  by the Minimality Condition, unless  $Y$  is I(NFL).<sup>28</sup>

Successive movement of  $Z$  to  $X$  through  $Y$  crosses no barriers.  $Z$ -to- $Y$  movement will turn  $Y$  into an L-marker, and will also remove the status of  $Y$  as an intervening governor.

It seems to be possible to reduce the complexity of the system blocking long distance head movement. A first step would be to assume that I can project a Minimality barrier, like all other heads.<sup>29</sup> If so, the Head Movement Constraint can be expressed in terms of Minimality only.

This suggests that any rules turning  $ZP$  into a barrier in (66) are redundant. This is argued for independently in Chomsky & Lasnik (1993), who suggest that the functional heads of the IP-system (Agr, T, i.e., the *L-related* functional heads, hosting the inflectional features of the verb) "free their complements from barrierhood".

The next step in simplifying the constraints on head movement would be to take the feature content of the various heads into account. Following Chomsky (1992), we may assume that movements are triggered by the requirement that the inflectional features associated with the functional heads be checked in a local configuration. Similarly, we may assume that interface representations (at LF and PF) containing unchecked features are not fully interpretable, hence 'ungrammatical'.

The Minimality Condition can be reduced to this requirement that all features be checked.<sup>30</sup> If a verb ( $Z$  in (66)) moves to C (in  $X$ ) skipping I (in  $Y$ ), the L-related features in I will remain unchecked and will yield an uninterpretable representation at the interfaces. This yields the core cases of Head Movement Constraint violations.<sup>31</sup>

Consider now what happens when verb movement and functional head movement interact. In particular, suppose that in (66)  $Y$  moves to  $X$  independently of the movement of  $Z$ . This would yield a chain  $(X, Y)$ , carrying both the features associated with  $X$  and the features associated with  $Y$ . As a result,  $Z$  can check the L-related features associated with  $Y$  in  $X$ . This makes it possible for  $Z$  to skip  $Y$  on its way to  $X$ .<sup>32</sup>

As I have argued in Zwart (1993a, 1993c), exactly this situation obtains in inversion constructions in Dutch.

Dutch (like German, Frisian, and the Mainland Scandinavian languages) shows a well-known asymmetry between main clauses and embedded clauses regarding the position of the finite verb.



Interestingly, in some dialects the complementizer agreement (c) and the verbal agreement (v) differ (Van Haeringen 1958).

- (70) a.            datte            wij        speult/\*speule            [East Netherlandic]  
                   that-PLc        we        play-1PLv/c
- b.            Wij        speult/\*speule  
                   we        play-1PLv/c

Now consider what happens in these dialects in constructions involving subject-verb inversion:

- (71) a.            Speule/\*speult            wij?  
                   play-PLc/v            we
- b.            Hier        speule/\*speult            wij  
                   here        play-PLc/v            we

In these constructions, the verb carries the complementizer agreement rather than the verbal agreement.<sup>37</sup> This confirms the idea that the verb moves to C in subject-verb inversion constructions in Dutch (cf. Den Besten 1977). However, the facts in (71) also suggest quite strongly that this verb movement to C skips AgrS. If the verb would move to C through AgrS, we would have to assume that the verbal morphology changes in the movement from AgrS to C.

On the other hand, if we assume that complementizer agreement is a reflex of independent AgrS-to-C movement, we can maintain that in (71) the verb moves to C, skipping AgrS, and that the morphology of the verb differs depending on whether its features are checked in AgrS (as in (70)) or in C (in (71)).<sup>38</sup>

This, then, is an example of a non-local head movement that the theory of head movement allows, once the Head Movement Constraint is reformulated in minimalist terms. Assuming that the complementizer agreement dialects of Dutch present insights in what is going on in Standard Dutch, we may conclude that AgrS-to-C movement, and V-to-C movement across AgrS, take place in Standard Dutch as well (cf. Zwart 1993b,c).

The upshot of this is that (61a) is not derivationally related to (60). Therefore, (61b) will never occur.<sup>39</sup>

- (60)            Je        hebt't            gezien  
                   you     have it seen  
                   "You've seen it."

- (61) a.            Heb    je        't        gezien?  
                   have you it        seen  
                   "Did you see it?"
- b.            \*            Heb 't je        gezien?  
                   have it you        seen

On the other hand, if no AgrS-to-C movement takes place in French, non-local head movement will not be allowed. Therefore, the verb has to move through AgrS on its way to C.<sup>40</sup>

As a result, (59b) is derivationally related to (58), so that (59a) will not occur.<sup>41</sup>

- (58) Tu l'as vu  
 you it have seen  
 "You've seen it."
- (59) a. \* As-tu le vu?  
 have you it seen  
 b. L'as-tu vu?  
 it have you seen  
 "Did you see it?"

If this is correct, the paradigm in (58)-(61) has no bearing on the status of the weak pronouns in Dutch. The clitics are stranded in AgrS in inversion constructions in Dutch because the verb skips AgrS on its way to C.

## 6.2 Parasitic Gaps

Recall the paradigm in (62)-(63).

- (62) \* Je l' ai retourné t sans finir e  
 I it have returned without finishing pg
- (63) dat ik t zonder e uit te lezen t weggelegd heb  
 that I it without pg out to read away put have  
 "that I put it aside without finishing (it)."

The question arises why Dutch clitics, like full noun phrases, license parasitic gaps, while French clitics do not.<sup>42</sup>

The answer to this question is relatively straightforward. It is not the clitic that licenses the parasitic gap in (63), but an empty element in Spec,AgrO.

Depending on the proper analysis of clitic placement, this empty element is either the trace of the clitic, or an empty phrasal noun phrase.

As is well known, the properties of clitic constructions present solid arguments for an analysis in which clitics are base generated as heads (Strozer 1976) as well as for an analysis in which clitics are moved from phrasal positions to head positions (Kayne 1975).

Sportiche (1992) proposes to combine the virtues of both types of analysis. He argues that clitics are base generated as heads of a so-called Clitic Phrase (CIP), associated with a phrasal noun phrase which may be covert or, in the case of clitic doubling constructions, overt. At some point in the derivation, the covert noun phrase (or the overt, doubling noun phrase) moves to the Spec,CIP, which explains the locality effects on clitic placement.

Let us adopt Sportiche's proposal. If it is correct, there is a covert noun phrase associated with the clitic. We may assume then that this empty noun phrase is the one that licenses the parasitic gap in (63).

Let us hold on to Chomsky's (1986) generalization that parasitic gaps must be licensed in overt syntax.<sup>43</sup> This implies that in Dutch, but not in French, there must be a position, occupied by the covert XP, from which the parasitic gap can be licensed.

We know independently that French does not have scrambling, and that scrambling in Dutch licenses parasitic gaps (Koster 1984, Bennis & Hoekstra 1984). Cf. (64), repeated here.

- (64)            dat ik het boek zonder e uit te lezen t weggelegd heb  
                   "that I put the book aside without finishing (it)."

We can now hypothesize that in Dutch, but not in French, the empty noun phrase associated with the Clitic Phrase moves to Spec,AgrO in overt syntax, licensing the parasitic gap from there.<sup>44</sup>

This analysis makes the immediate prediction that if a language has clitics but does not have scrambling, the clitics will not be able to license parasitic gaps. As is well known since Holmberg (1986), this prediction is borne out for Swedish:

- (72) a.            Johan köpte            inte    boken  
                   John bought            not    the-book  
                   "John didn't buy the book."  
       b.            \*            Johan köpte            boken            inte  
                   John bought            the-book        not
- (73) a.            \*            Johan köpte            inte    den  
                   John bought            not    it  
       b.            Johan köpte            den    inte  
                   John bought            it     not

(72) illustrates the fact that Swedish does not have scrambling. (73) shows that Swedish does appear to have clitic placement (called Object Shift in Holmberg 1986).<sup>45</sup>

As (74) shows, the clitic does not license a parasitic gap (example adapted from Holmberg 1986:173).

- (74)            \*            Johan köpte den inte t            innan han hade läst e  
                   John bought it not            before he had read  
                   "John didn't buy it before he read (it)."

(74), we can now say, is ungrammatical because no overt movement to Spec,AgrO (or to the spec of Sportiche's Clitic Phrase) takes place in Swedish (cf. (72)).

Importantly, it turns out from this analysis that parasitic gaps are never licensed by clitics. Again, the fact that Dutch clitics appear to be different from French clitics reduces to independent properties of the grammars of Dutch and French, and does not reflect on the status of the weak pronouns in either language.

## 7. Conclusion

In conclusion, weak object pronouns and full noun phrases in Dutch have different syntactic properties.

It can be shown, in Exceptional Case Marking constructions, in the scrambling paradigm (that is, in the positioning of adverbs and noun phrases), and in the paradigms connected with double object construction, that the weak pronouns move to a position to the left of the formal licensing position of phrasal objects.

We have assumed, with Kayne (1975, 1991), that weak pronouns that show these properties are heads.

Following Sportiche (1992) we have assumed that clitics head their own phrases. Sportiche's analysis of movement of a (possibly empty) doubling noun phrase to Spec,CIP (or to Spec,AgrOP) can now be combined with the familiar analysis of object movement to Spec,AgrO: the empty noun phrase moves to Spec,AgrO (and to Spec,CIP) in overt syntax iff overt noun phrases move to Spec,AgrO in overt syntax. This explains why clitics in Dutch, but not in French, appear to license parasitic gaps. The parasitic gaps are licensed by the covert noun phrase associated with the clitic, and can only be licensed when the covert noun phrase moves in overt syntax.

The independence of object clitics in Dutch in constructions involving inversion (verb movement to C) follows from an independently proposed analysis of AgrS-to-C movement in Dutch (Zwart 1993a), which makes it possible for the Verb to skip AgrS on its way to C. The Head Movement Constraint, reformulated in minimalist terms, does not block this non-local head movement, because all the L-related features are checked in the course of the derivation. This analysis has the additional advantage that there is no inherent distinction between internal clitics (of the French type) and external clitics (of the Dutch type), a distinction proposed in Jaspers (1989).

Thus, apparent differences between clitics in Dutch and French reduce to independently established properties of the grammars of these two languages.

In this paper, I have only looked at two languages, one from the Romance family and one from the Germanic family. The two languages are generally considered to be fundamentally different as far as the syntax of cliticization is concerned. But if I am correct, the differences are not fundamental, but an effect of independent syntactic differences between the two languages. This makes it possible to discern a common core of syntactic properties of clitics, namely that they are heads and may undergo head movement.

It is expected that if we look beyond Germanic and Romance, many more bewildering differences in the syntax of cliticization will appear. Yet we may also expect that these differences are to a large extent the result of independent syntactic differences among languages, and that behind these differences, more fundamental syntactic properties of clitics are waiting to be discovered.

I hope to have shown in this paper that it can be a fruitful strategy not to pass judgment on what these crucial properties of clitic constructions are until the input of various languages and language families has been taken into account.

## Notes

\* An earlier version of this paper was presented at the ESF Workshop on Clitics and Other Non-Lexical Categories, Lund, May 22, 1992. Thanks are due to the organizers and participants of this workshop. I also would like to thank Judy Bernstein, Anna Cardinaletti, Liliane Haegeman, Aaron Halpern, Eric Hoekstra, Jan Koster, and Toshifusa Oka. A slightly different version of this paper appeared as 'Notes on Clitics in Dutch' in L. Hellan, ed., *Clitics in Germanic and Slavic*, Eurotyp Working Papers Volume 4 (pp. 119-155), Working papers from the European Science Foundation Eurotyp project, Theme group 8 (Clitics). This version has benefited greatly from comments by the editors.

1. Object pronouns and indirect object pronouns are identical.
2. With the exception of the 3PL object pronouns. The 3SG neuter object pronoun has an orthographic full form *het* but is never pronounced as a strong pronoun.
3. It is assumed that people cannot be repaired.
4. In 3SG and 3PL, a special pronoun *zich* is used as a SE-anaphor. I will not discuss *zich* in this paper.
5. In addition, it can be shown that numerous stock phrases require the weak variant when they contain a pronoun. The stock phrases in (i) are not of a productive type, and the weak pronouns are obligatory. When made productive, as in (ii), the phrases allow both weak and strong pronouns.

- (i)
- |    |       |                    |  |  |  |  |  |
|----|-------|--------------------|--|--|--|--|--|
| a. | Dank  | je/*jou            |  |  |  |  |  |
|    | thank | you                |  |  |  |  |  |
| b. | Ben   | je/*jij !          |  |  |  |  |  |
|    | are   | you                |  |  |  |  |  |
|    |       | "Are you crazy?"   |  |  |  |  |  |
| c. | Denk  | je/*jij ?          |  |  |  |  |  |
|    | think | you                |  |  |  |  |  |
|    |       | "Do you think so?" |  |  |  |  |  |
| d. | Zie   | je/*jij            |  |  |  |  |  |
|    | see   | you                |  |  |  |  |  |
|    |       | "You see."         |  |  |  |  |  |
- (ii)
- |    |           |        |   |            |  |           |  |
|----|-----------|--------|---|------------|--|-----------|--|
| a. | Ik bedank | je/jou | hartelijk                                       |            |  |           |  |
|    | I thank   | you    | cordially                                       |            |  |           |  |
| b. | Ben       | je/jij | nu  | helemaal   | gek                                    | geworden? |  |
|    | are       | you    | now   | totally    | crazy                                  | became    |  |
|    |           |        |   |            | "Are you completely out of your mind?" |           |  |
| c. | Denk      | je/jij | nog weleens                                     |            | aan vroeger?                           |           |  |
|    | think     | you    | still sometimes                                 |            | to earlier                             |           |  |
|    |           |        | "Do you still think of the old days sometimes?" |            |  |           |  |
| d. | Zie       | je/jij | wat   | ik bedoel? |  |           |  |
|    | see       | you    | what  | I mean     |  |           |  |

"Do you see what I mean?"

6. Certain idiomatic expressions require phonologically reduced forms such as in (i). Again, this does not show that phonologically reduced forms are lexically stored.

- (i) Hij knijpt'm als een ouwe/\*oude dief  
 he pinches him like an old thief  
 "He is very much afraid."

7. Several people have suggested to me that this might be taken to indicate that English weak pronouns are special clitics rather than simple clitics. This may be correct, but that does not affect the point made in the text, namely that the standard tests for cliticness apply to all weak elements, not just to special clitics.

8. Full pronouns (unless heavily stressed) cannot appear to the left of the embedded subject in Exceptional Case Marking constructions in Dutch, as (i) shows:

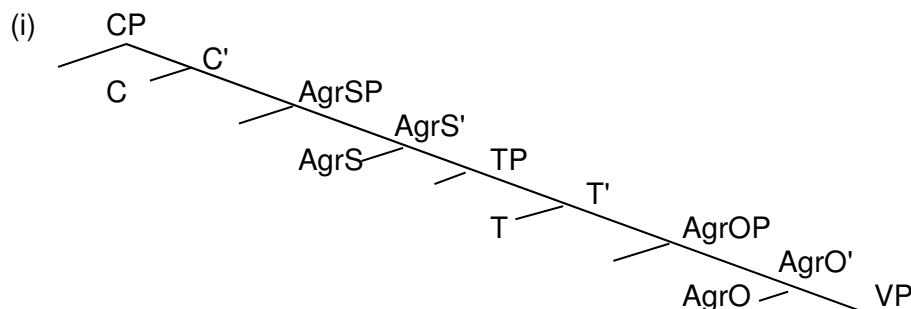
- (i) dat wij ons Marie voelden kietelen  
 that we us Mary felt tickle  
 "that we felt that we were tickling Mary."  
 "\*\*?that we felt that Mary was tickling us."

9. Indefinite objects receive a specific interpretation when preceding a sentence adverbial. This would have to receive an independent explanation, but movement to such a position is clearly not restricted to morphologically definite noun phrases. I do not see any reason to conclude that the interpretation of indefinites is directly related to structural position.

10. This syntactic licensing in specifier positions of functional heads is formally equivalent to Case marking in Chomsky (1981), with the major difference that the structural relation involved in the licensing operation is a specifier-head relation, rather than a head-government relation. See Chomsky (1989), Chomsky (1992) and Chomsky & Lasnik (1993), among others.

11. Adverbs are neither thematically nor formally tied to specific positions. One would expect them to be able to appear everywhere, optimally. However, there are certain constraints, some of them holding only in particular dialects. E.g. the Dutch dialect of West Flemish does not allow adverbs between the complementizer and the subject (Liliane Haegeman, p.c.). These matters should be further studied.

12. Assuming the following minimal syntactic structure (Chomsky 1989):





13. In an earlier version of this paper, I assumed that the higher AgrOP was situated in the matrix clause and the lower AgrOP in the embedded clauses. After the paper was presented I came to the conclusion that there cannot be an AgrOP in the embedded clause in ECM constructions in Dutch. Rather, we must assume that there are several AgrOPs stacked on top of the matrix VP in these constructions. The word order facts follow if we assume that there is a strict ordering in the AgrOPs, such that the AgrOP associated with the embedded subject is situated between the AgrSP and AgrOP associated with the embedded object. A similar fixed order of AgrPs must be assumed in double object constructions. In all these constructions it looks like the movement of the NPs from the base positions to the licensing positions yields crossing paths rather than nesting paths. I thank Edith Kaan and Liliane Haegeman for discussing the properties of ECM constructions with me.

14. I agree with Haegeman (1991, 1992b) that the paradigm in (41) indicates that clitics may be adjoined to various functional heads. Thus, the clitic in (41a) may be adjoined to the higher AgrO, whereas the clitic in (41b) is adjoined to AgrS. Adjunction to various functional heads is puzzling from the minimalist point of view, which does not allow for optional movement. I will leave this as a topic for further study.

15. The choice of adverb is irrelevant here. No type of adverb may intervene between the subject and the clitic/finite verb.

16. The paradigm in the text is present in southern dialects. My intuitions relate to the Brabantish dialect spoken in the South of the Netherlands (cf. Zwart 1991a). Haegeman (1991) demonstrates the existence of the same paradigm in West Flemish.

17. If either the verb *kus* or the direct object *meisjes* in (47b) is contrastively stressed, the adverb appears to be able to take wide scope, and the nongeneric interpretation of the direct object becomes available again. The judgments in the text are about neutral stress patterns.

18. The weak pronoun *'r* in these cases is not to be confused with the 3SG feminine weak object pronoun *'r* in Standard Dutch. The *'r* in (48) appears to be morphologically related to quantitative *er* in Standard Dutch (see Bech 1952). In Brabantish, the 3SG feminine weak object pronoun is *ze* rather than *'r* (thanks to Hanneke Ramselaar for pointing this out to me).

19. In double object constructions involving particle verbs, the order DO-IO appears to be more acceptable.

(i)     dat    ik        het boek       Marie terug gegeven heb  
          that I       the book       Mary back given have

As always, only neutral intonation is considered.

20. See Den Dikken & Mulder (1991) for arguments against an analysis involving movement of the two objects as one constituent.

21. This reduces much of the argumentation in Den Dikken & Mulder (1991) for analyzing the indirect object in double object constructions as a PP. I assume, following in part Haegeman (1991), that indirect objects are licensed in an AgrOP of their own, situated between TP and the AgrOP for direct objects (cf. note 12). If the indirect object is also generated higher than the direct object (Hoekstra 1991), at some point in the derivation a PCC-violation seems to occur. However, this is also the case in Exceptional Case Marking constructions (cf. note 13), and, if we assume the VP-internal subject hypothesis, it may be the case that A-movement generally yields crossing rather than nesting paths (cf. Chomsky 1992:26).

22. Haegeman (1991) notes that (57) is grammatical in West Flemish. We may accept her view that clitics may be adjoined to various functional heads. In (57), the direct object clitic would be adjoined to the AgrO associated with the licensing of the indirect object. This does not affect the argumentation in the text.

23. This point was brought to my attention by Anna Cardinaletti.

24. That the finite verb is in the AgrS position in subjectinitial main clauses in Dutch is argued for at length in Travis (1984, 1991) and Zwart (1991a, 1991b, 1993a, 1993c).

25. Obviously, in the direction of adjunction of the clitic the maximal similarity of French and Dutch breaks down. Several ways to achieve maximal similarity also in this respect suggest themselves. It seems to me that the most promising approach would be to argue that clitics in French adjoin to the right as well, as appears to be the case for subject clitics in complex inversion constructions (cf. Rizzi & Roberts 1989:6). Possibly, the clitic-verb order results from movement of the verb to the functional head hosting the clitic. In that case, the order verb-clitic could be the result of clitic movement to the head hosting the verb. For this approach to work, it must be possible that the verb skips the head hosting the clitic in languages showing the verb-clitic order. I will not develop this possibility here.

Note that the difference in direction of adjunction of object clitics cannot be explained away by assuming that in subject initial main clauses in Dutch the verb is in C and the clitic left-adjoined to AgrS, because then one would expect the order Subject-Verb-Adverb-Object Clitic to be grammatical (since adverbs can be adjoined to AgrS, as in (46) in the text).

26. Again, the assumption that French and Dutch are similar in this respect may turn out to be wrong. Verb-movement to C in questions in Germanic is well-established (Den Besten 1977), but Hulk (1992) argues that Verb-movement to C in questions in French does not take place. In this matter, much depends on the correct analysis of French Complex Inversion (sentences like *Pourquoi Jean l'a-t-il fait* 'why John it-has-he done' "Why did John do it?"), for which see Rizzi & Roberts (1989) and De Wind (in prep.).

27. L-marking is  $\theta$ -government by a head hosting a lexical element (Chomsky 1986:69).  $\theta$ -government is the relation between a head and the sister  $\theta$ -marked by that head (Chomsky 1986:15). It is assumed that I  $\theta$ -governs VP, and that I L-marks VP after V-to-I movement (Chomsky 1986:69).

28. The Minimality Condition states that an intervening governor blocks antecedent government, technically by turning its (immediate or maximal) projection into a barrier (Chomsky 1986:42). IP and I' are supposed to be defective and cannot be turned into a Minimality barrier (Chomsky 1986:48). In other words, I does not count as an intervening governor for antecedent government.

29. Chomsky's reason to assume that I is defective for the Minimality Condition is that otherwise I would project a Minimality barrier for adjunct movement (1986:48). If the Minimality Condition reduces to economy of derivation, as suggested in Chomsky & Lasnik (1993), this problem does not occur. See below.

30. At least, as far as crossing functional heads is concerned. Other aspects of Minimality, e.g. barring non-local incorporation, follow from economy of derivation (requiring steps to be as short as possible, Chomsky 1992).

31. One of the core Head Movement Constraint violations, the type *Kiss John will Mary?*, will follow from economy of derivations. Here, the L-related features in I are checked by the auxiliary, and movement of the embedded verb to C is blocked by the 'shortest steps' requirement. Alternatively, this type of construction is blocked because the tense feature needs to end up in C at LF, which is impossible if the infinitive moves to C. Cf. Zwart (1994) for discussion.

32. See Zwart (1993c) for argumentation that movement in one step in this case is more economical than successive head movement.

33. A more detailed description of the verb movement to AgrS and the AgrS-to-C movement would make a distinction between N-features (involved in licensing the subject) and V-features (involved in licensing the verb) of AgrS (cf. Chomsky 1992). The precondition for subject licensing that no unchecked features be present in the head of AgrSP obviously cannot refer to N-features, because this would make N-feature checking impossible to begin with. Therefore, we must state that the head of AgrSP may not contain any unchecked *V-features* for N-feature checking to take place. See Zwart (1993c), section III.4.4.

34. The AgrS-to-C movement is not considered to be a movement of an affix, but abstract movement. Thus, it is a way to formally express cohesion between two heads. It is assumed that inflected forms are inserted in fully inflected form, and undergo movement to check their abstract morphological features (Chomsky 1992, Zwart 1993c).

35. Remarkably, no vestige of complementizer agreement is found in the Mainland Scandinavian languages, although preferably the main-embedded clause asymmetry in these languages should receive an explanation in terms of AgrS-to-C as well. It should be noted, however, that the Mainland Scandinavian languages show limited morphological agreement to begin with. See Hoekstra 1993 and Zwart 1993c for more discussion of the distribution of complementizer agreement.

36. See Zwart (1993b) for more discussion of the question whether or not I-to-C movement is restricted to dialects showing overt complementizer agreement.

37. A similar phenomenon is present in Standard Dutch in 2SG:

- (i) a. jij speelt/\*speel  
you play  
b. speel/\*speelt jij?  
play you

38. See Zwart (1993c), section III.3.3.3 for a technical account of the morphological difference between a verb in C and a verb in AgrS. The idea pursued there is that in the relevant dialects the verb in C must have a special form that expresses the head-head agreement relation between C and AgrS. The verb in AgrS does not need such a form, because no head-head agreement relation is involved.

39. A potential problem with this analysis is that the clitic in (61a) is adjoined to the trace of AgrS (as I have assumed that AgrS moves to C in inversion constructions in Dutch). Possibly, a clitic only goes along in head movement if the head that moves is occupied by a lexical element. In other words, if the clitic is adjoined to a functional head that is occupied by a lexical element, or if a lexical element adjoins to the functional head occupied by the clitic, the clitic and the lexical element glue together and have to stick together under further head movement. These are also the only cases that present direct evidence against adjunction of a clitic to a trace. Evidence that clitics cannot adjoin to the trace of an independently moved functional head is not available, however.

40. The fact that there is no asymmetry between main clauses and embedded clauses with respect to the position of the verb in French suggests that French lacks independent AgrS-to-C movement.

41. Implicit in the discussion in this section is the assumption that once two heads are joined they cannot be separated. Thus a clitic adjoined to a functional head occupied by a verb can never be separated from the verb. It is, of course, possible that this assumption is wrong, and that a process of excorporation may separate the verb and the clitic in a language like Dutch (suggested by Vikner & Schwartz 1994), but I will not pursue that option here.

42. Of course, until it has been established that it lies in the nature of clitics that they do not license parasitic gaps, the fact that French clitics do not tells us nothing. The properties of clitics in other languages or language families might be revealing in this respect.

43. This generalization is based on the observation that wh-elements in situ do not license parasitic gaps. Assuming, as Chomsky (1992:53) does, that wh-elements in situ do *not* raise to the wh-position at LF, this argument is no longer valid. However, the minimalist approach yields another argument to conclude that parasitic gaps must be licensed in overt syntax. If parasitic gaps could be licensed at LF, languages without overt object movement to Spec,AgrO ought to have parasitic gaps just like overt object movement languages.

44. Probably an even better suggestion would be to equate the Clitic Phrase for object clitics with AgrOP (and *mutatis mutandis* for all Clitic Phrases Sportiche proposes). This would effectively reduce the number of new projections that his

proposal seems to imply. This proposal is not compatible with the phrase structure in Koopman & Sportiche (1991), where AgrOP is situated to be inside  $V^{\max}$ . I will not discuss the consequences of this suggestion here, but see Zwart 1993c.

45. For (73a) to be grammatical, the pronoun needs stress.

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