ON ITEMS INTRODUCING FINITE RELATIVE AND INTERROGATIVE CLAUSES IN ENGLISH AND DUTCH*

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I. INTRODUCTION

In this paper, some phenomena about the items introducing finite relative and interrogative clauses (complementizers, pronouns and determiners) in English and Dutch are reviewed. It will be suggested that a generalization obtains across the two languages that the rule that moves constituents containing pronouns and determiners in such clauses can only be characterized as a 'complementizer substitution' (rather than 'complementizer attraction') transformation if there is a complementizer in the language which belongs to the same morphological class as the characteristic item contained in the constituent moved.

In section II below it is demonstrated that in English there is one morphological class of pronouns and determiners characteristic of finite relative and interrogative clauses, viz. wh- items, whereas in Dutch there are two such morphological classes, d-items and w- items. Among the complementizers in relative and interrogative clauses, English again has a member of the morphological wh- class (whether); by contrast, Dutch does have a d- item among its complementizers (dat), but no w- item. In section III it is shown that whereas moved English wh- constituents (i.e. constituents containing a wh- item) and Dutch d- constituents are mutually exclusive with complementizers (and will consequently by said to have been moved by a 'complementizer substitution, transformation), Dutch w- constituents can freely (though with stylistic consequences) be followed by complementizers (and have therefore been moved by

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a 'complementizer attraction' transformation). Finally, in section IV it is suggested that apparently arbitrary differences between English and Dutch complementizer-pairs can be systematically accounted for in the approach developed below.

II. ITEMS INTRODUCING FINITE RELATIVE AND INTERROGATIVE CLAUSES

English finite relative and (pronominal) interrogative clauses may contain any one of the following pronouns and/or determiners: who, whom, whose, which, what, where, when, why, how and compounds derived from these, mainly in -ever (e.g. whatever; also: whence and 'prepositional adverbs' such as whereat, whereby, etc.). On the basis of the morphological element shared by most of these, they are commonly referred to as wh- pronouns and determiners. Thus for instance:

- (1) the girl who you kissed is my sister
- (2) which girl did you kiss
- (3) he asked which girl you kissed

In the parallel cases Dutch selects from two sets of pronouns and/or determiners: the so-called d- set (die, dat) and a set most of whose members share the morpheme w-, the w- set (wie, wat, wiens, wier, welk(e), wanneer, hoe, waar, and the 'prepositional adverbs' based on waar such as waarop, waarbij, etc.). Thus compare English <math>(1) — (3) to their Dutch equivalents (4) — (6) respectively:

- (4) a het meisje dat je kuste is mijn zuster b het meisje wat je kuste is mijn zuster¹
- (5) welk meisje kuste je
- (6) hij vroeg welk meisje je kuste

It will be noted that in (4) there are two possibilities: dat and wat. This may suggest that only (4b) is really a parallel to (1), (4a) rather being like (7):

(7) the girl that you kissed is my sister

Such an identification of Dutch dat as in (4a) with English that as in (7) might seem to get additional support from the fact that the morphemes that and dat are also parallel in both appearing as demonstrative pronouns/determiners:

- (8) I wanted that (thing)
- (9) ik wilde dat (ding)

However, there are a number of differences in the behaviour of the demonstrative that as in (8) and the that appearing in (7): see (10) — (14); rather, the latter is similar to the complementizer that: see (15). On the other hand, the behaviour of the demonstrative dat in (9) is very similar to the dat appearing in (4a) (and different from the complementizer dat, see below): see (16) — (21).

- (10) a I wanted that thing (=(8))
 b the thing that I wanted (cf. (7))
- (11) a I looked at that
 b *the thing at that I looked
- (12) a *I wanted that things b the things that I wanted
- (13) a I wanted those things b *the things those I wanted
- (14) a *I wanted thing b the thing — I wanted

Thus, with respect to the (im) possibility of being preceded by a preposition (such as at: (11)), the (in) compatibility with a plural noun (see (12) — (13)), and optional/obligatory nature (see 14)), the two that's differ consistently. The that introducing a relative clause (as in (7) and (10b)) rather patterns in the same way as the complementizer that (cf. (15)), with which it may therefore be identified:

- (15) a he said that I wanted it
 - *b he was amazed at that I wanted it
 - *c he said those I wanted it
 - d he said I wanted it

Now consider the Dutch examples (16)—(21), similar in principle to English (10)—(14):

- (16)a ik wilde $dat \operatorname{ding} (=(9))$
 - b het ding dat ik wilde (cf. (4a))
- (17)a *ik zorgde voor(-)dat
 - b *het ding voor(-)dat ik zorgde
- (18)a *ik wilde dat dingen
 - b *de dingen dat ik wilde
- (19)a ik wilde die dingen
 - b de dingen die ik wilde
- (20)a *ik wilde dat boot (I wanted that boat)
 - b *de boot dat ik wilde

³ Many of the Dutch examples are subject to dialectal differences in acceptability; thus in colloquial Dutch (4b) is far more normal than (4a), the latter, however, being preferred in formal and/or written Dutch.

(21)a ik wilde die boot b de boot die ik wilde

The Dutch dat's of (4a), (16b) and of (9), (16a) consistently behave in the same way with respect to the impossibility of being preceded by a preposition (such as voor: (17)), incompatibility with a plural noun (see (18)) and incompatibility with a singular noun of de gender (see (20); cf. 'het ding', *'de ding', *'het boot', 'de boot'). On this basis both these dat's are identified as pronouns/determiners (either demonstrative or relative respectively). Consequently, (4b) is not to be considered as a parallel to (7) (nor (16b) to (10b)):

- (7) the girl that you kissed ...: that=complementizer
- (4)b het meisje dat je kuste ...: dat=pronoun

However, the issue is complicated by the fact that in Dutch relative clauses also an introducing item dat may appear which does not behave as the dat exemplified so far:

(22) het moment dat je kwam (the moment you came)

Applying the 'preposition', 'plural noun', and 'de gender' tests to the dat in (22) we get:

(23)a hij betreurde dat moment (cf. (16a)) (he regretted that moment)

b het moment dat je kwam (=(22))

(24)a *hij schaamde zich voor(-)dat (he was-ashamed-about that)

b het moment voor-dat je kwam

(25)a *hij betreurde dat momenten

b de momenten dat je kwam

(26)a hij betreurde die momenten

b *de momenten die je kwam

(27)a *hij betreurde dat dag (he regretted day)

b de dag dat je kwam

(28)a hij betreurde die dag

b *de dag die je kwam

As was shown to be the case with the that introducing relative clauses in English, this Dutch dat patterns like the complementizer dat:

(29)a hij zei dat ik het wilde (he said that I it wanted)

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b hij zei het voor- dat ik het wilde
(he said it before that I it wanted)
c* hij zei die ik het wilde
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In addition to the complementizers that in English and dat in Dutch, each language has at least one more finite clause complementizer:

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(30)a he said that
                            I wanted it (=(15a))
   b *he said
                whether
                            I wanted it
   c *he said
                that whether I wanted it
   d *he said
                whether that I wanted it
(31)a *he asked that
                            I wanted it
   b he asked whether
                            I wanted it
   c *he asked that whether I wanted it
   d *he asked whether that I wanted it
(32)a hij zei
                dat
                            ik het wilde (=(29a))
   b *hij zei
                of
                            ik het wilde
   c *hij zei
                dat of
                            ik het wilde
   d *hij zei
                of dat
                            ik het wilde
(33)a *hij vroeg dat
                            ik het wilde
   b hij vroeg of
                            ik het wilde
   c *hij vroeg dat of)
                            ik het wilde
   d hij vroeg of dat
                            ik het wilde2
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From the complementary distribution of whether with that it can be concluded that, given that that is a complementizer in (30a), whether is a complementizer as well in (31b). The situation in Dutch is slightly more complicated, since of and dat are not mutually exclusive, as (33d) shows. The approach implicitly adopted in Paardekooper (1971), as evidenced by his spelling: ofdat, is to consider of dat as one word. This solution, (getting some support from the impossibility of the opposite sequence (see (33c)), is the simplest one for our purposes: thus of/ofdat is in complementary distribution with dat, so that, given that dat is a complementizer in (32a), of/ofdat in (35b) and (33d) is a complementizer as well.

Summarizing, it appears that both English and Dutch have one finite clause complementizer that belongs to the same morphological class as (some of) the pronouns and determiners characteristic of relative and interrogative clauses, and one finite clause complementizer that does not thus belong to a morphological class of relative and interrogative pronouns and determiners. These facts may be schematically represented as in Table I:

^{1 (33}d) is rather colloquial, (33b) being preferred by many speakers.

pronouns/determiners - + + + - complementizers + + + + + + +

Table I: Items introducing English and Dutch finite relative and interrogative clauses, classified morphologically.

III. MOVEMENT IN FINITE RELATIVE AND INTERROGATIVE CLAUSES

In what follows it is taken for granted that the wh-, d- and w- constituents that introduce finite relative and interrogative clauses are not base-generated in situ, but are generated in those positions that allow them to be assigned the appropriate grammatical functions. Thus, who in (1), which girl in (2) and (3), dat and wat in (4), and welk meisje in (5) and (6) are direct objects: underlying these examples would therefore be structures approximated in (34) and (35):

(34)a ... you kissed who ... (underlying (1))
b ... you kissed which girl ... (underlying (2) and (3))
(35)a ... je dat kuste ... (underlying (4a))
b ... je wat kuste ... (underlying (4b))
c ... je welk meisje kuste ... (underlying (5) and (6))

To get the direct objects of (34) and (35) into their clause-introducing surface position, we assume a structure preserving transformation which moves them into COMP (cf. Emonds (1976)), COMP being the clause-initial category into which complementizers may be placed

(36) SD: ...
$$\begin{bmatrix} comp ... \end{bmatrix}$$
 ... X ... 1 2
SC: 1 2 \Rightarrow 2 \varnothing (X=English wh -, Dutch d -, w -)

In (present-day) English, if a wh-constituent is moved into COMP it is mutually exclusive complementizers with:

(37)a the girl who you kissed ... (=(1))
b *the girl who that you kissed
c *the girl that who you kissed
d *the girl who whether you kissed
e *the girl whether who you kissed

We will therefore call wh- movement a complementizer 'substitution' transformation.

In Dutch, a moved d- constituent is also mutually exclusive with complementizers:

(38)a de jongen die je kuste (cf. (4a))
(the boy who you kissed)
b *de jongen die dat je kuste
e *de jongen die of(dat) je kuste
e *de jongen of(dat) die je kuste

Thus, Dutch d- movement, like English wh- movement, is a complementizer substitution transformation. A different picture emerges however in the case of w- movement: w- constituents in COMP are (more or less) freely followed (but never preceded) by complementizers:

(39)a het meisje wat je kuste

b het meisje wat dat je kuste

c *het meisje dat wat je kuste

d het meisje wat of(dat) je kuste

e *het meisje of(dat) wat je kuste

The transformation which moves a constituent into COMP with the result that the moved constituent may co-occur with complementizers we will call a complementizer 'attraction' transformation.

To represent the facts dealt with in this section, the relevant parts of Table I (i.e. columns 2, 3, and 4) may be extended as in Table II:

Table II: Introducing items and movement transformations in English and Dutch finite relative and interrogative clauses, classified morphologically (sub=complementizer substitution

attr=complementizer attraction)

(i) hij vroeg wat of (dat) je wilde (he asked what you wanted)

(ii) het ding wat of (dat) je wilde (the thing which you wanted)

are about equally accepted and both much better than

(iii)* het ding dat of (dat) je wilde

4 (39b) sounds worse to me than (39d); however, both seem to me to be possible, which was also the judgement that emerged from the experiment alluded to in note 3.

³ Traditionally, the complementizers dat and of (dat) are said not to co-occur with relative pronouns/determiners (e.g., Rijpma and Schuringa (1969:161); van Calcar's (1973) doubts whether this tradition does justice to the actual data were confirmed in a small-scale experiment carried out by some students which showed that

The facts a presented in Table II suggest that there is, for English and Dutch, a correlation between whether the language has a complementizer of the same morphological class as the characteristic items in the constituents moved and whether the transformation that moves these constituents is a complementizer substitution or a complementizer attraction transformation. ⁵ Thus we get the generalization (40) across English and Dutch:

(40) In finite relative and interrogative clauses, movement transformations are only complementizer substitution transformations if a complementizer is available in the language which belongs to the same morphological class as the characteristic pronouns/determiners contained in the constituents moved

IV. ENGLISH AND DUTCH COMPLEMENTIZERS COMPARED

As a comparison of (10b) to (14b) and of (15a) to (15d) (here repeated as (41)) shows, the insertion of the complementizer that under COMP is optional in certain cases in English:

(41)a the thing that I wanted (=(10b))
b the thing I wanted (=(14b))

c he said that I wanted it (=(15a))

d he said I wanted it (=(15d))

This phenomenon has no direct parallel in Dutch (although, as (39b) and (39d) versus (39a) show, insertion of a complementizer under COMP is optional in Dutch if a w- constituent has been attracted to COMP):

(42)a het moment dat je kwam (=(22))

b *het moment je kwam

c hij zei dat ik het wilde (=(29a))

*hij zei ik het wilde

It would seem that the optionality of inserting English that versus obligatory insertion of Dutch dat under COMP correlate to whether or not these complementizers figure in Table II. In other words, that may well be less 'important' than dat because it does not have any implications with respect to whether a transformation is complementizer substitution or attraction.

Similarly, the difference between the English complementizer whether and the Dutch complementizer of now appears to be systematic. Whether is a

wh- item and thus correlates with wh- movement being a complementizer substitution transformation; by contrast, of (like dat) is not a w- item and thus w-movement is not a complementizer substitution transformation. It has often been argued (cf. Grimshaw (1977:211-214) and the references cited there) that English whether should be analyzed as wh-+-either. Such an analysis nicely fits in with the argument of this paper: it makes it possible to say that both English either and Dutch of can serve as either a conjunction in a correlative coordination or as a complementizer:

(43)a they ask wh-either John comes

b they ask either John or Peter

(44)a ze vragen of Jan komt

b ze vragen of Jan of Piet

Thus, either/whether and of are much more similar than they would appear to be at first sight: they have essentially the same distribution, appearing either as a correlative conjunction or as a complementizer; only, English wh-movement is a complementizer substitution transformation: thus, a wh-complementizer is required and therefore to either as complementizer wh- is added, so that it will actually emerge as whether.

V. CONCLUSION

The similarities and differences in the behaviour of English that and Dutch dat introducing finite relative clauses require a description by which that is always a complementizer, whereas dat may either be a complementizer or a pronoun. This means that Dutch has a morphological class of d- items which contains both d- pronouns and a d- complementizer, just as English has a morphological class of wh- items which contains both wh- pronouns and/or determiners and a wh- complementizer. However, Dutch also has a morphological class of w- items containing pronouns and/or determiners likewise introducing finite relative and interrogative clauses, but no complementizer. This correlates with a difference between movement transformations in finite relative clauses and interrogative clauses: wh- and d- movement are complementizer substitution transformations, w- movement is a complementizer attraction transformation. In this light it is possible to give a principled account of some otherwise arbitrary facts: the optionality of the English complementizer that versus the obligatoriness of the Dutch complementizer dat in many equivalent cases, and the relation between the English correlative conjunction either and complementizer whether and the Dutch correlative of and complementizer of.

It should be emphasized that this paper restricts itself to these two languages; none of its claims are intended as candidates for universality, its only aim being to develop a systematic account of the phenomena discussed.

REFERENCES

- Calcar, W. van. 1973. "Het voegwoord 'of". In Hulshof, H. (ed.). 1975. 262-280.
- Emonds, J. E. 1976. A transformational approach to the English syntax. New York: Academic Press.
- Grimshaw, J. B. 1977. English wh- constructions and the theory of grammar. Facsimile, Ann Arbor: University Microfilms International.
- Hulshof, H. (ed.). 1975. Transformationeel-generatieve grammatica in artikelen. Groningen: Tjeenk Willink.
- Paardekooper, P. C. 1971. Beknopte ABN syntaxis. Den Bosch: Malmberg.
- Rijpme, E. and Schuringa, F. G. 1969. Nederlandse Spraakkunst. Groningen: Wolters.