

A NOTE ON "IDENTITY OF
CONSTITUENTS"¹

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Fodor (1970, 429) noticed that (1) is a grammatical sentence although the proform *do so* refers to the transitive verb *melt* which is not contained in the structure underlying (1):

- (1) Floyd melted the glass though it surprised me
that it would do so.

The transformation which introduces *do so* can apply in spite of the syntactic differences, apparently because *melt* (transitive) and *melt* (intransitive) are phonologically identical. From this observation Fodor (1970, 437) concludes "that the widely held view that such [pro] forms enter into surface structure only as a result of deletion under identity . . . may be false".

By presenting some data from German I want to show that there seem to be good reasons for refining the notion "Identity of Constituents". More precisely: I will argue that syntactic rules and in particular some rules for deletion under identity cannot refer only to structural, lexical, and referential, but also to phonological, identity of elements. Once this is accepted as a possible condition on transformations it would not be necessary to follow Fodor's conclusion, but rather to use the notion "identity" in a more differentiated way. This would mean that sentences like (1) could be handled in a natural way within a transformational grammar.

One of the cases where each one of two identical elements from coordinate structures can be deleted is the case of conjoined subordinate clauses in German. So from (2a) we can derive (2b) and (2c).

- (2) a. weil Hans Bier trinkt und Franz Milch trinkt
'because Hans drinks beer and Franz drinks milk'
b. weil Hans Bier und Franz Milch trinkt
c. weil Hans Bier trinkt und Franz Milch

Now consider (3):

- (3) a. weil ich Bier trinke und du Milch trinkst
b. *weil ich Bier und du Milch trinkst
c. weil ich Bier trinke und du Milch

¹ I am grateful to Barbara H. Partee for several suggestions and for bringing to my attention example (11).

The fact that the difference between *trinke* and *trinkst*, which can be taken to be a difference in the syntactic feature [person], blocks deletion of the verb in (3b) but not in (3c) can be explained in several ways.² Whatever explanation we regard as valid has to allow us to derive (4b) from (4a) despite the fact that (4b) is a construction parallel to the ungrammatical (3b).

- (4) a. weil wir das Haus kaufen und die Müllers den Garten kaufen
 ‘because we buy the house and the Müllers buy the garden’
 b. weil wir das Haus und die Müllers den Garten kaufen
 c. weil wir das Haus kaufen und die Müllers den Garten

It seems that the difference in person can be “compensated” for by the identity of the phonological shape of the verbs; in other words: (4b) is grammatical because Coordinate Deletion can refer under certain conditions to the identity of phonological features instead of to the identity of certain “syntactic” ones. For another example which illustrates this even more convincingly, consider (5) and (6).

- (5) a. weil Franz das Haus kauft und ich den Garten kaufe
 b. *weil Franz das Haus und ich den Garten kaufe
 (6) a. weil Franz das Haus kaufen könnte und ich den Garten kaufen könnte
 b. weil Franz das Haus und ich den Garten kaufen könnte

The question now arises, whether there are other syntactic features whose identity is neglected by Coordinate Deletion in case the elements in question have identical phonological shape. The following data show that this is so.

² Along the lines of Ross (1970), who argues for German being SVO, we would derive (2c) by applying first Gapping and then Scrambling to the structure underlying (2a), and (2b) by applying both rules in the reverse order. A similar derivation would follow from Koutsoudas (1971) who calls the relevant rules Object Preposing and Coordinate Deletion. What seems to be important for the explanation of (3) is the fact that the deletion rule would be a later rule in the derivation of (3b) than it is in (3c), so one might argue that this later deletion rule has to refer to a more specified P-marker than the earlier one. We will leave this question here because our argument does not rely on the details of the derivation but on the difference in grammaticality between (2b) and (3b).

For simplicity we will call the rule which deletes identical elements from coordinate structures Coordinate Deletion. This does not mean that we accept Koutsoudas’ analysis.

- (7) a. der Antrag des Lehrers oder der Lehrer
 'the petition of the teachers or of the teacher'
 b. *der Antrag des oder der Lehrer
- (8) a. der Antrag des Dozenten oder der Dozenten
 b. der Antrag des oder der Dozenten

In (8b) identity of number of the nouns is disregarded.

- (9) a. der älteste Lehrer oder die älteste Lehrerin
 'the oldest teacher (masc.) or the oldest
 teacher (fem.)'
 b. *der oder die älteste Lehrerin
- (10) a. der älteste Abgeordnete oder die älteste
 Abgeordnete
 'the oldest delegate (masc.) or the oldest
 delegate (fem.)'
 b. der oder die älteste Abgeordnete

Here identity of gender is disregarded. With respect to case endings things are not as clear as in the examples shown so far. We can say (11) but most people can also say (12b).

- (11) a. mit Geld und ohne Geld
 b. mit und ohne Geld
- (12) a. mit Kindern und ohne Kinder
 b. mit und ohne Kinder

We definitely get (13b), which would have to be derived from a structure underlying (13a):

- (13) a. Hans trennte sich von seinen alten Freunden
 und suchte sich neue Freunde.
 'Hans left his old friends and looked for new
 friends.'
 b. Hans trennte sich von seinen alten Freunden
 und suchte sich neue.

It seems that difference in case never blocks the application of Coordinate Deletion as long as this difference appears as one of case endings.³ This would be in accordance with the generally held view that the role which case endings play in the grammar of German is becoming more and more marginal.

³ It should be emphasized that we are talking about case endings. Therefore, we do not get (ib) from (ia)

- (i) a. mit dem Geld und ohne das Geld
 b. *mit und ohne das Geld

simply because a definite article in German does not consist of a meaning bearing stem morpheme and a case ending in the way a noun or adjective does.

From the facts presented I conclude that identity of phonological matrices has to be considered a condition on certain transformations. To take a well known example for this, we do not find (14):

(14) *He dived and he dove.

Moreover, phonological identity of elements may lead a rule to disregard the nonidentity of certain syntactic features of the same elements.

In concluding this squib let me give one further example which (in my opinion) shows that grammar can be considerably simplified if one is ready to accept phonological identity or nonidentity as a condition on transformations. Perlmutter (1970) states a surface structure constraint for the relative order of clitic pronouns in Spanish. Perlmutter argues that it is not only difficult but impossible to account for the order of clitics by a clitic reordering transformation since there would be no way to avoid sequences of clitics like (15) which are not grammatical:

(15) a. *se se lo
b. *se se los

The second *se* in both cases is the so called spurious *se* which is derived under certain conditions from other pronouns by the spurious *se* rule. This transformation is obligatory. If it would be blocked (hence blocking the derivation) in all cases where the *se* it introduces is preceded by a pronoun with identical phonological shape, one could handle the cases in question by the clitic reordering transformation.

References

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