

## B. GERMAN WORD-ORDER RULES

Most German sentences are matched by other sentences in which the same words are arranged in a different order but in such a way that the meaning remains the same except for stylistic overtones. Thus the sentence Ich habe das Buch gelesen 'I have read the book' is matched by Das Buch habe ich gelesen, and Gelesen habe ich das Buch.

I propose to handle these sentences by choosing one permutation to represent the whole set of sentences, generate this permutation in the normal way, and then generate the others by means of special transformational rules operating on this basic type. These special transformational rules will have to proceed by first moving up some portion of the sentence into first position, and then permuting the subject noun phrase and the finite verb. In order to carry out the first part of the operation, however, the rules will have to specify what portions of the sentence are preposable. In the example quoted above there are two such preposable portions: the word gelesen and the phrase das Buch. Notice that in the basic sentence these two portions are contiguous, do not overlap, and make up all of the sentence except the subject and finite verb. Facts of this kind have

prompted grammarians to assume that all sentence constituents other than the subject and the finite verb are preposable. This is unfortunately not the case.

The restrictions on the operation of the prepose rule are in fact quite extensive, some of them of a trivial nature, others not. If we take, for example, the sentence Ich habe meinen Bruder schon zweimal gesehen, 'I have seen my brother twice', we discover that there are four preposable portions: meinen Bruder, schon zweimal, zweimal, and gesehen. We note that one of these portions (zweimal) is contained in one of the others (schon zweimal), and one word in the basic sentence is not preposable, viz. schon. In the sentence Ich weiss es 'I know it', there are no preposable portions, although it is usually possible to prepose an object pronoun (e.g. , Ich kenne ihn 'I know him' - Ihn kenne ich). Other sentence constituents occur only preposed. Thus the so in So bin ich überzeugt, dass er da ist. 'So I'm convinced that he's there', must appear in first position. In such a case we have no basic sentence from which to derive the sentence with the preposed so, or alternatively we must regard the prepose rule in some cases as obligatory, a solution that is clearly counterintuitive. One restriction on the operation of the prepose rule is of an unusual kind and will be described at some length. The argument will necessitate a digression into the area of semantics.

There are certain ambiguous noun phrases in German, and in other European languages, exemplified by the English phrase my sister. If we compare the sentence My sister has gone to New York with the sentence That woman over there is my sister, we notice the following fact. The phrase my sister in the first sentence refers to a very specific person, whereas in the second sentence one obvious interpretation is to make the phrase my sister merely refer descriptively to a characteristic of the 'woman over there', or more exactly to a relationship between her and the speaker of the utterance. I shall say, therefore, that the phrase my sister can be used either referentially or descriptively; in the first sentence, My sister has gone to New York, we have an instance of its referential use, and in the second sentence, That woman over there is my sister, an instance of its descriptive use.

One other type of ambiguity is relevant to our problem, and this is exemplified in the English sentence Thursday is the fifth day of the week. There are two rather obvious interpretations of this sentence. In the first the sentence would supply information about Thursday, and in the second it would supply information about the fifth day of the week. Or to put the matter a little differently, we can imagine this sentence as an answer to the question What is the fifth day of the week? or as an answer to the question What is Thursday? If we reverse the order of the noun phrases, i. e. , if we say The fifth day of the week is Thursday, a similar ambiguity appears.

We shall now consider analogous sentences in German, and observe their behavior under the prepose rules. For this purpose let us use the following:

(XIII. MECHANICAL TRANSLATION)

(1) Meine Schwester ist das tüchtigste Mädchen in der Klasse.

(2) Das tüchtigste Mädchen in der Klasse ist meine Schwester.

We shall number the interpretations in each case a and b, and adopt the convention of saying that there are as many sentences as there are interpretations. Thus we are dealing with four sentences, not two.

Let us run through the four sentences and recall their interpretations. Sentence (1a) Meine Schwester ist das tüchtigste Mädchen in der Klasse, is an answer to the question Wer ist das tüchtigste Mädchen in der Klasse?, whereas sentence (1b) of the same shape answers the question Wie ist es mit deiner Schwester? or the like. Sentence (2a) Das tüchtigste Mädchen in der Klasse ist meine Schwester is, as (1a) is, an answer to the question Wer ist das tüchtigste Mädchen in der Klasse?, sentence (2b) being, on the other hand, an answer to the question Wie ist es mit dem tüchtigsten Mädchen in der Klasse? or some such similar question. The situation, in other words, is entirely parallel to the English examples that we discussed.

But now let us examine the phrasal ambiguity of meine Schwester. The descriptive use of the phrase occurs only once, namely in (2b), whereas in the other three sentences the phrase is used referentially. It is also the case that while the referential phrase occurs both as initial noun phrase and as noninitial noun phrase (initially in (1a) and (1b), and noninitially in (2a)), the descriptive phrase occurs only in the noninitial position.

Let us now examine the operation of the prepose rules on these sentences, concentrating for this purpose on (1b) and (2b). Sentence (1b) appears after the transformation has been applied as Das tüchtigste Mädchen in der Klasse ist meine Schwester. This sentence has the same phonemic shape as (2), but differs in that the sentence stress occurs on Klasse. (In other words, the sentence stress appears on the same word in the transformed sentence as in the basic sentence.) Let us recall that this sentence conveys information about a particular person designated by the phrase meine Schwester. In other words, the phrase meine Schwester is being used referentially. Notice, moreover, that the referential phrase appears in the noninitial position. However, this fact is not in any way surprising, since we were already aware of the fact that the referential phrase can equally well occupy initial or noninitial position. We recall that it was the descriptive phrase that, thus far, has only appeared in one position, namely noninitially. But now the following problem arises. If we were to take (2b) and apply the same transformation, would we not end up with a sentence in which the descriptive phrase meine Schwester appears in initial position? This would in fact be the case, if such a sentence existed. However, it appears that no such sentence occurs. There is no sentence, that is, of the shape Meine Schwester ist das tüchtigste Mädchen in der Klasse such that the phrase meine Schwester is used descriptively and the sentence as a whole is an answer to the question Wie ist es mit dem tüchtigsten Mädchen in der Klasse?

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There is, therefore, a rule in German which requires that descriptively employed noun phrases occur only in noninitial position in the sentence, and that noun phrases occurring in initial position should be interpreted referentially. Moreover, this rule has priority over the type of transformational rules that we proposed to establish to take care of the preposing of sentence elements. Can it legitimately be said; therefore, that the semantic rule acts as a restriction on the transformational rules? Clearly, that would be the case only if we had some way of referring to the restriction purely in terms of the symbols in the string to be transformed and their derivational history. But, as far as is known at present, semantic distinctions of the kind with which we are concerned here would not be likely to show up in the derivational history, nor would they be represented in the string of symbols constituting the structural description of the sentences in question.

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