



PROGRESS REPORT NO. 2

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PROTHETIC THERE, SENTENCES WITH BE TO, AND RELATED TOPICS.

Let us suppose that one of the expansions of the verb phrase is simply into the copula be without Predicate. In sentences having the simple copula, the subject Noun Phrase must be it S. P-markers of such sentences will be like that of Fig. 1:

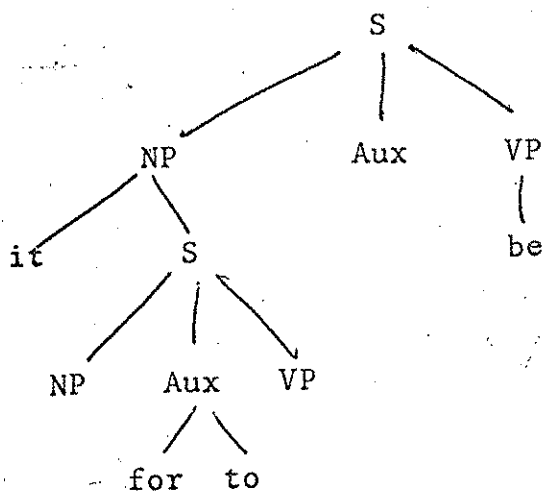


FIG. 1

Applying the rule of complement separation (L. & R., Prog. Rep. 1, p. 4), we get the structure:

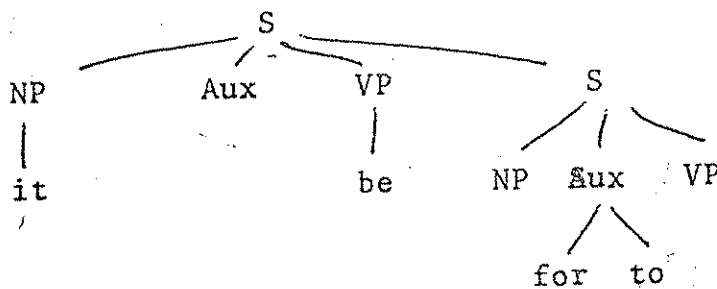


FIG. 2

We may then apply to such structures a rule which replaces the initial it with the last noun phrase of the complement; thus from the strings It is for you to butter your toast with $\left\{ \begin{smallmatrix} a \\ the \end{smallmatrix} \right\}$ knife having the constituent structure of Fig. 2, we get: $\left\{ \begin{smallmatrix} A \\ The \end{smallmatrix} \right\}$ knife is for you to butter your toast with. The rule which performs this operation may be considered to be the same one which forms John is easy to please from the underlying It is easy to please John. It is not only the last noun phrase of the complement which may be so moved; any noun phrase dominated by the verb phrase of the complement is moveable, allowing such sentences as Toast is for you to butter with a knife and Toast is easy for you to butter with a knife, to be generated. We may state the rule as follows:

1. X it Aux be (Adj for NP) [for NP to Y NP Z]_S

1	2	3	4	5	6	7	8	9	10	11	12	13	→
1	12	3	4	5	6	7	8	9	10	11	∅	13	

T
NP in VP

(The reasons for considering the predicate of sentences containing adjectives such as easy to comprise the Adjective with the adjunct for NP see our Prog. Rep. 1, pp. 7-8.)

Consider again the sentences:

(1a) A knife is for you to butter your toast with

(1b) The knife is for you to butter your toast with

Note that in sentences of the type (1a), no modal auxiliary is permitted, and the tense ~~may~~^{have to} be present; that is we ~~may~~ not get:

(1c) ?*A knife was for you to butter your toast with

(1d) *A knife may be for you to butter your toast with

These restrictions do not hold when the grammatical subject has a definite determiner, as in (1b). To account for these restrictions, we may suppose that in sentences of type (1a) a modal auxiliary appears having no phonological shape, and like the modal auxiliary must, occurring in the present tense. There is, however, an apparent serious difficulty with this proposal, namely that it involves stating a selectional restriction holding between the choice of modal auxiliary and the determiner of noun phrases embedded to any depth in a subordinate sentence. But the difficulty is only apparent. Consider now sentences such as:

(2a) There is a knife for you to butter your toast with

(2b) There was a knife for you to butter your toast with

(2c) There may be a knife for you to butter your toast with

In deriving these sentences, we may suppose there to be intermediate points in their derivations in which they appear as:

(2a') A knife is for you to butter your toast with

(2b') A knife was for you to butter your toast with

(2c') A knife may be for you to butter your toast with

Then, a rule applies to these sentences which postposes the grammatical subject to the copula, leaving in its place the element there. This rule applies in general when the subject of be is a noun phrase with an indefinite determiner, and the predicate ^{may be empty or} be an adverbial phrase or a sentence; the rule is required to generate correctly not only sentences (2a)-(2c),

but also such sentences as:

(3a) There are two children in the street

(3b) There is a great distance between the earth and the sun

(3c) There is no time for us to see Aunt Margaret today

(3d) There will be another war

Prothetic there must have the analysis Noun Phrase, since it is treated as such by T, T for noun phrase and other rules. Consider, for example, such sentences as:

(4a) I expect (for) there to be another war.

(4b) There was expected to be another war

(4c) There happened to be two children in the street

Consequently, the rule governing there-insertion and the postposition of the subject Noun Phrase must read:

2.	[Indef X N] NP	Aux	be	(AdvP S)	
	1		2	3	==> T there
	there		2+1	3	

Rule 2, however, must be prevented from applying in case the auxiliary contains the special phonologically zero modal discussed earlier. We now see that the occurrence of the special modal is free with respect to the character of the determiner of the grammatical subject. If that determiner is indefinite and the special modal occurs, then sentences like (1a) are produced. If the special modal does not occur, and that determiner is indefinite, then rule 2 must apply giving sentences like (2)-(3).

There is another rule which may be applied to strings having the structure given in Fig. 2, namely T , provided, noun phrase, however, that the special modal is chosen. Thus, from an underlying string It is for you to butter your toast with a knife, is gotten: You

(5a) You are to butter your toast with a knife

The past tense is permissible here:

(5b) You were to butter your toast with a knife

If sentence (1c) is considered to be grammatical, then there is no difficulty in accounting for this fact.

The semantic character of the special modal is, roughly, obligation, if the subject is animate. When the subject is inanimate, it is not entirely clear what its semantic character is; consider, for example, such sentences as:

(6a) Water is to flow over this dam.

(6b) Congress is to enact the Civil Rights Bill soon.

In conclusion, we remark that sentences like:

(7a) I had toast for you to butter with a knife

(7b) I had a knife for you to butter toast with

have the following structure, where sentences like (1a) are embedded as relative clauses to the object noun of have:

The reason that these sentences are to be considered relative clauses rather than complements to the nouns they modify is that in them, there is a common noun phrase, which is deleted.

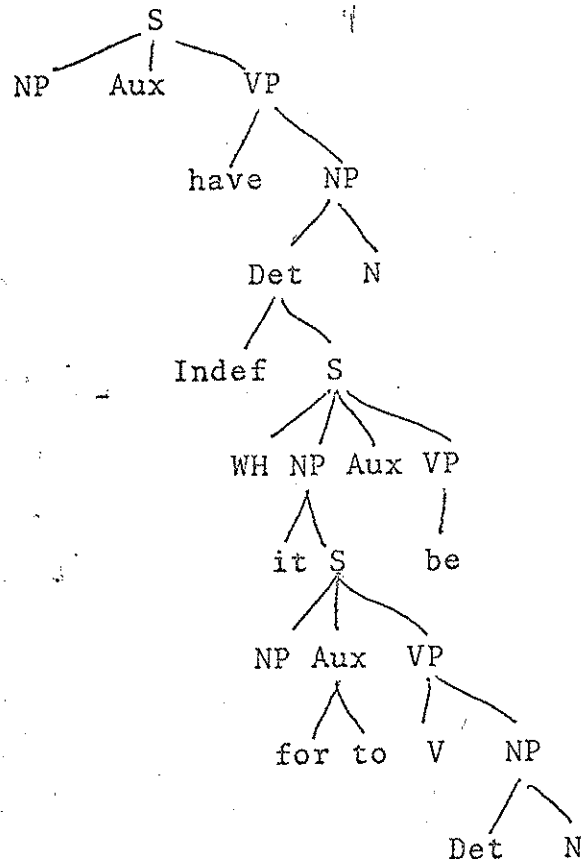


FIG. 3

When the subject of the complement to it (which together form the subject of the relative clause) is identical with the subject of the main sentence, it is, of course, deleted, resulting in such sentences as:

(7c) I had toast to butter with a knife

(7d) I had a knife to butter toast with

We give here the thorough derivation of the sentence I have toast to butter

1. I have [[study] WH [it. [I [for to] butter toast] S] NP Aux be] S Det toast] NP underlying
2. I have [[study] WH [it [for I to butter toast] S] NP Aux be] S Det toast] NP T for separation
3. ~~I have~~ [[study] WH [it [for I to butter toast] S] NP Aux be] S Det toast] NP T comp separation
4. I have [[study] WH [it] S NP Aux be [for I to butter toast] S] S Det toast] NP T NP in NP
5. I have [[study] [which] S NP Aux be [for I to butter] S] S Det toast] NP T relative attachment
6. I have [[study] Det toast [which] S NP Aux be [for I to butter] S] S NP T relative separation
7. I have [[study] Det toast [for I to butter] S] NP T which is deletion
8. I have [[study] Det toast [to butter] S] NP T equilibrium deletion

(cf. Eng. Rep. 1, p. 7)