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A PREPOSITIONAL PHRASE ADJUNCT OF WISE-CLASS ADJECTIVES

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The following sentences possess identical surface appearances, but a study of sentences related to them indicates that each sentence must have a different underlying structure.

- (1) it was wise to hit John
- (2) it was unconstitutional to hit John
- (3) it was difficult to hit John

Related to sentence (1) is the pair (4). The pairs (5) and (6), however, are ungrammatical.

- (4) a. it was wise of Bill to hit John
- b. Bill was wise to hit John
- (5) a. \*it was unconstitutional of Bill to hit John
- b. \*Bill was unconstitutional to hit John
- (6) a. \*it was difficult of Bill to hit John
- b. \*Bill was difficult to hit John

Related to sentence (3) is the sentence (7), but (8) and (9) are ungrammatical.

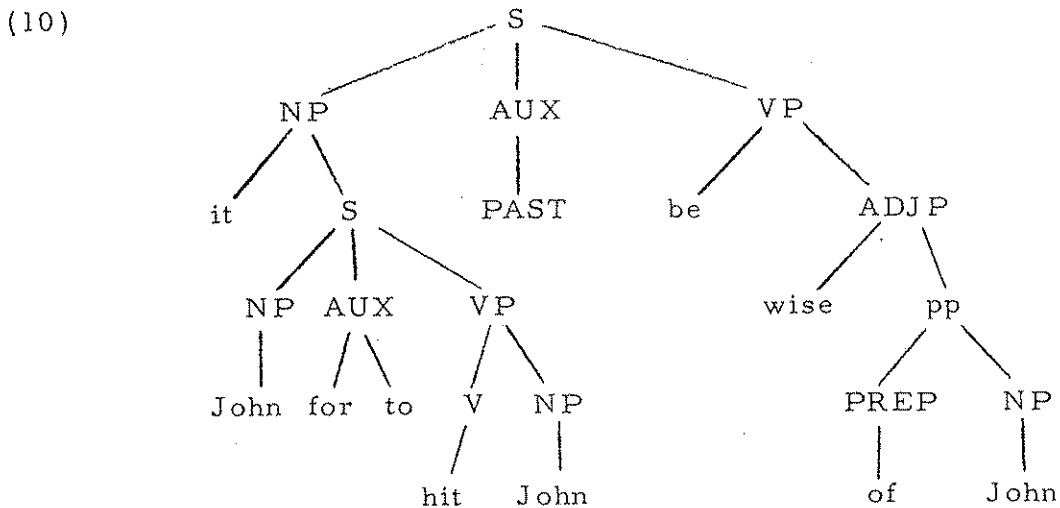
- (7) John was difficult for Bill to hit
- (8) \*John was wise of Bill to hit
- (9) \*John was unconstitutional for Bill to hit

A syntactic analysis which differentiates (1) from (2) and (3) must assume that the prepositional adjunct "of Bill," common to (1) but not to (2) and (3), is present in the underlying or deep structure

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(for "deep structure" Cf. N. Chomsky, Aspects of the Theory of Syntax, MIT Press, (in press)). Thus, underlying sentence (4a) is the following phrase structure configuration:



It is observed that two restrictions hold in the derivation of (4a) from the above underlying structure. First, a restriction obtains between the subject "John" of the included sentence and the adjective "wise" in the including sentence. Furthermore, the subject of the included sentence must be identical to the noun phrase in the prepositional adjunct to the adjective in the including sentence. Thus, (10) and (11) are ungrammatical and (12) is doubly so.

(10) \*it was wise of two year (for two years) to pass

(11) \*it was wise of Bill for John to come

(12) \*it was wise of two years for Bill to come

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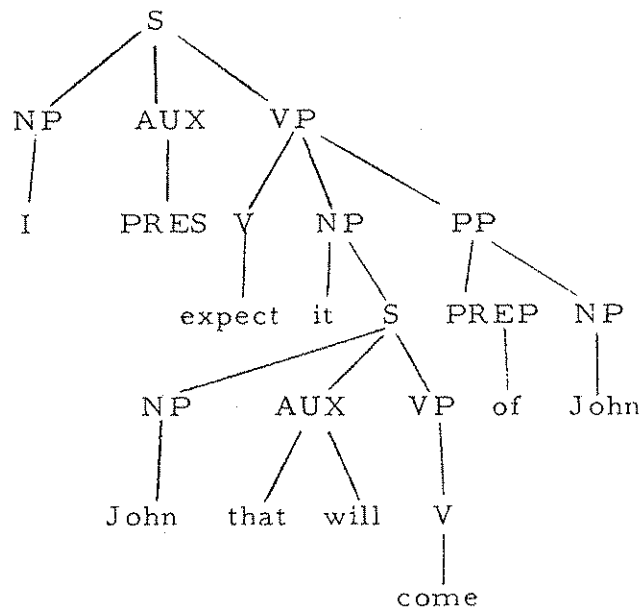
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The analysis suggested above is parallel to that which we propose for certain verbal complement constructions, e.g., as in (13) which has (14) as its underlying structure.

(13) I expect it of John that he will come

(14)



In this instance, "of John" is analyzed as a prepositional adjunct of the verb "expect." Restrictions similar to those mentioned with respect to the derivation of (4a) obtain here, ruling out (15), (16) and (17) as ungrammatical.

(15) \*I expect it of sincerity that it will frighten John

(16) \*I expect it of John that Bill will always be truthful

(17) \*I expect it of sincerity that Bill will always be truthful

(The sentence "I expect sincerity to frighten Bill" is perfectly acceptable. This sentence has a different underlying analysis, one to be discussed in detail in other papers.)

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Certain of the following transformations are required to map underlying structures onto surface structures such as that of (4a). Independent motivations for these transformations will not be specifically discussed in this paper, but, since the rules are basic to the complement system in English, they will be employed often in following progress reports.

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### TRANSFORMATIONS

1. Y NP that Z S

<sup>T</sup>that

1 2 3 4

1 3 2 4

2. Y it NP for to Z

<sup>T</sup>for separation

1 2 3 4 5 6

1 2 4 3 5 6

3. Y for to Z

<sup>T</sup>for deletion

1 2 3 4

1  $\emptyset$  3 4

4. Y it (PP) S Z

<sup>T</sup>it deletion

1 2 3 4 5

1  $\emptyset$  3 4 5

5. Y of NP to Aux Z

<sup>T</sup>of deletion

1 2 3 4 5

V-obligatory

1  $\emptyset$  3 4 5

Adj-optional

6. Y Prep S Z

<sup>T</sup>Prep deletion

1 2 3 4

1  $\emptyset$  3 4

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7. Y it S Z

1 2 3 4

1 3 2 4

<sup>T</sup>S separation or  
Extrapolation

8. Y it Aux V for NPX

1 2 3 4 5 6

1 5 3 4  $\emptyset$  6

<sup>T</sup>noun phrase subject

9. Y it AUX V<sub>Adj</sub> NP PP S Z

1 2 3 4 5 6

1 4 3  $\emptyset$  5 6

<sup>T</sup>Adjunct

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Consider now the derivation of (1).

- (18) [ it [ John for to come ]<sub>S</sub> ]<sub>NP</sub> was wise [ of John ]<sub>pp</sub>      BASE
- i [ it [ for John to come ]<sub>S</sub> ]<sub>NP</sub> was wise [ of John ]<sub>pp</sub>      T<sub>for separation</sub>
- ii [ it ]<sub>NP</sub> was wise [ of John ]<sub>pp</sub> [ for John to come ]<sub>S</sub>      T<sub>extraposition</sub>
- iii [ it ]<sub>NP</sub> was wise [ of John ]<sub>pp</sub> [ for to come ]<sub>S</sub>      T<sub>equivalence</sub>
- iv [ it ]<sub>NP</sub> was wise [ of John ]<sub>pp</sub> [ to come ]<sub>S</sub>      T<sub>for deletion</sub>

The derivation of the related and synonymous sentence (4b) raises the question as to which "John," that in [ of John ]<sub>pp</sub> or that in [ for John to come ]<sub>S</sub>, actually replaces the subject "it."

- (19) John was wise to come

The transformation, T<sub>noun phrase subject</sub> cannot be employed for reasons of simplicity. This transformation would operate on the "John" in S. Note, however, that if we permit this transformation to apply in adjectival constructions, the structural description becomes non-unique since it is precisely this transformation which derives "Clay was difficult for Liston to hit" from "it was difficult for Liston to hit Clay," taking the final NP and not the initial NP as in (19). Thus, we employ T<sub>adjunct</sub> which operates on "John" in [ of John ]<sub>pp</sub> after the optional deletion of "of."

It is noteworthy that T<sub>adjunct</sub> is also motivated in verbal complement constructions like (13). In fact, in such constructions this transformation is essential. Sentence (20) is ambiguous between the interpretations (21) and (22).



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(20) John was expected to come

(21) John's coming was expected

(22) it was expected of John that he would come

This ambiguity can be explained only on the assumption that (20) is derived from the underlying structure (23) by  $T_{\text{noun phrase subject}}$  and from (24) by  $T_{\text{adjunct}}$

(23) somebody expects [it [for John to come]<sub>S</sub>]<sub>NP</sub>

(24) somebody expects [it [for John to come]<sub>S</sub>]<sub>NP</sub> of John<sub>pp</sub>

(These derivations will be illustrated in a later working paper.) Thus, the derivation of (19) is completed as follows:

(25) [it]<sub>NP</sub> was wise [of John]<sub>pp</sub> [to come]<sub>S</sub> Cf. p. 6

v [it]<sub>NP</sub> was wise [John]<sub>pp</sub> [to come]<sub>S</sub>  $T_{\text{of deletion}}$

vi [John]<sub>NP</sub> was wise [to come]<sub>S</sub>  $T_{\text{adjunct}}$

Arguments identical to those above may be employed to demonstrate that the structure underlying (3), but neither (2) nor (1), is as follows:

(26) [it [someone for to hit John]<sub>S</sub>]<sub>NP</sub> is difficult [for someone]<sub>pp</sub>