Free X-Bar Theory, Specificity, and Wh-Movement

0. INTRODUCTION

This paper is part of an ongoing study which seeks to unify two basic hypotheses given serious consideration in the 'principles and parameters' framework. One hypothesis, in its strongest form, 'generalized X-bar theory', holds that all categories project to phrases, including functional elements traditionally analyzed as specifiers (Abney 1987). The other proposal, from Chomsky (1986b), claims that the same phrasal boundaries which block government figure in barring movement. Here I will attempt to subsume generalized X-bar theory under a more generally 'free' X-bar theory and then focus on the nature of Wh-movement, including the possible structural effect of specificity on it, given such a system of phrase structure.

1. EXTENDING THE SCOPE OF X-BAR THEORY

The basic claim of X-bar theory is that a phrase XP is endocentric in structure, composed of a head X and its dependents. All phrases are thus viewed as projections of their heads.

It has been less clear whether all categories project to phrases. X-bar theory was first proposed for the lexical categories N, V, and A (Chomsky 1970); others generalized it to P (Emonds 1976, Jackendoff 1977). Early attempts to extend it to specifiers met with limited success, since abstract structure was predicted for which there was little straightforward evidence. For example, Jackendoff (1977), exploring the possibility of the existence of specifier phrases, saw them as dependents within lexical phrases, following standard X-bar (Chomsky 1970). However, it was unclear what kind of complements these 'nonlexical' heads might take. They obviously did not take the kind of theta-marked complements found with the lexical heads N, V, A, and, presumably, P.

In the current view, functional elements are heads which subcategorize for corresponding lexical phrases. Fukui (1986), Hellan (1986), Speas (1986), and Abney (1987), for example, have proposed that the entire 'noun phrase' is actually a determiner phrase (DP) in which the D head selects a subpart of the phrase, now labeled NP, as a complement. Chomsky (1986b) extends the scope of X-bar in the same fashion to INFL (I) and complementizer (C) (see Stowell 1981, Chomsky 1981), considering the extention of X-bar to nonlexical categories to be
“[e]vidently ... the optimal hypothesis” (Chomsky 1986b, p. 3). It seems reasonable to suppose that X-bar theory will be as general as possible and thus free of stipulations regarding the categories and levels of representation to which it applies.

Abney (1987) proposes generalizing X-bar to all functional heads (Fs), including auxiliaries (AxS) and degree expressions (Dgs; see also Brame 1981, 1982) so that major phrases have the abstract structure represented in (1a) rather than the one shown in (1b) (ignoring intermediate levels in (1a)):

\[
(1) \begin{align*}
\text{a.} & \quad \text{FP} & \quad \text{b.} & \quad \text{LP} \\
& \quad F & \quad F & \quad L' \\
& \quad \text{LP} & \quad \text{L} & \quad \text{LP^*} \\
& \quad \text{L} & \quad \text{FP} & \quad \text{L} \\
\end{align*}
\]

Such a view of phrase structure, which will be taken here as a working hypothesis, has implications for any theory which employs the functional/lexical distinction, as Chomsky (1986b) uses the notion of L-marking (roughly defined as theta-marking by an L head) in determining bounding nodes for movement (and barriers to government). In (1a), LP is typically not L-marked, unlike LP* in (1b).

Some discussion is in order regarding the presence of AxP when there is no overt auxiliary. It seems reasonable to posit that noun phrases without overt determiners have null D heads, since the null Ds have a reading ('generic') and cooccurrence restrictions (selecting plural or noncount, but not singular, NPs). However, the situation with non-overt Ax is less clear. We will see that AxP, and thus a null head Ax, is needed for our analysis of Wh-movement. There may be some independent justification for this claim. Consider a 'simple past' verb such as told in (2).

\[
(2) \begin{align*}
\text{a.} & \quad \text{when John put the child to bed, he told her a story} \\
\text{b.} & \quad \text{whenever John put the child to bed, he told her a story}
\end{align*}
\]

(2a) is ambiguous; the simple past verb could have either a simple 'preterite' type of meaning, in which John put the child to bed and then told her a story on some occasion, or it could refer to an event that occurred generally, i.e. every time he put her to bed. Suppose that in the first reading one type of null Ax appears — call it Ax$_1$ —, whereas in the second reading we have Ax$_2$. Only Ax$_2$ can cooccur with the whenever phrase in (2b). Further, Ax$_2$ is associated with the most common uses of the simple present, Ax$_1$ being reserved only for the so-called 'vivid past' found in storytelling and sportscasting, for example. The reading associated with Ax$_1$ in English, by the way, is expressed by an overt Ax (plus