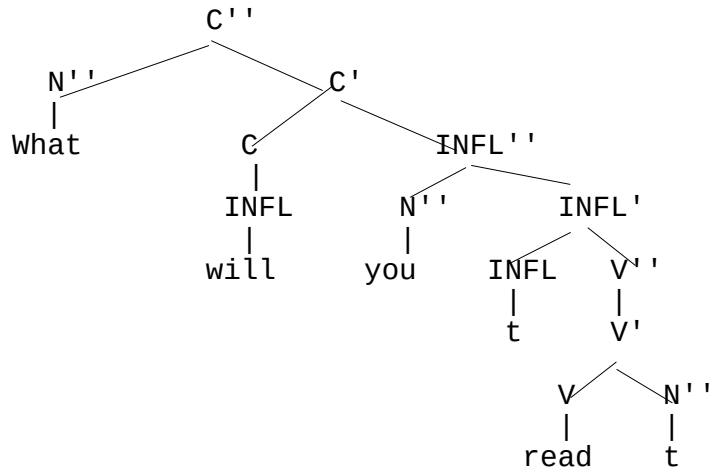
Ling. 610

Subjacency
November, 2018

We found a way to analyze the superficially unusual S and S' as perfectly well-behaved X' structures, IP and CP, respectively. Recall that the SPECifier position of an XP category is the sister of X'. We have made use of this position in our analysis of possessives as SPECs of NP (or DP); of NP (or DP) as SPEC of IP. CP, then, is also expected to have a SPEC position. It is reasonable to conjecture that this is the position that WH-phrases move to, as illustrated in (1).

(1)

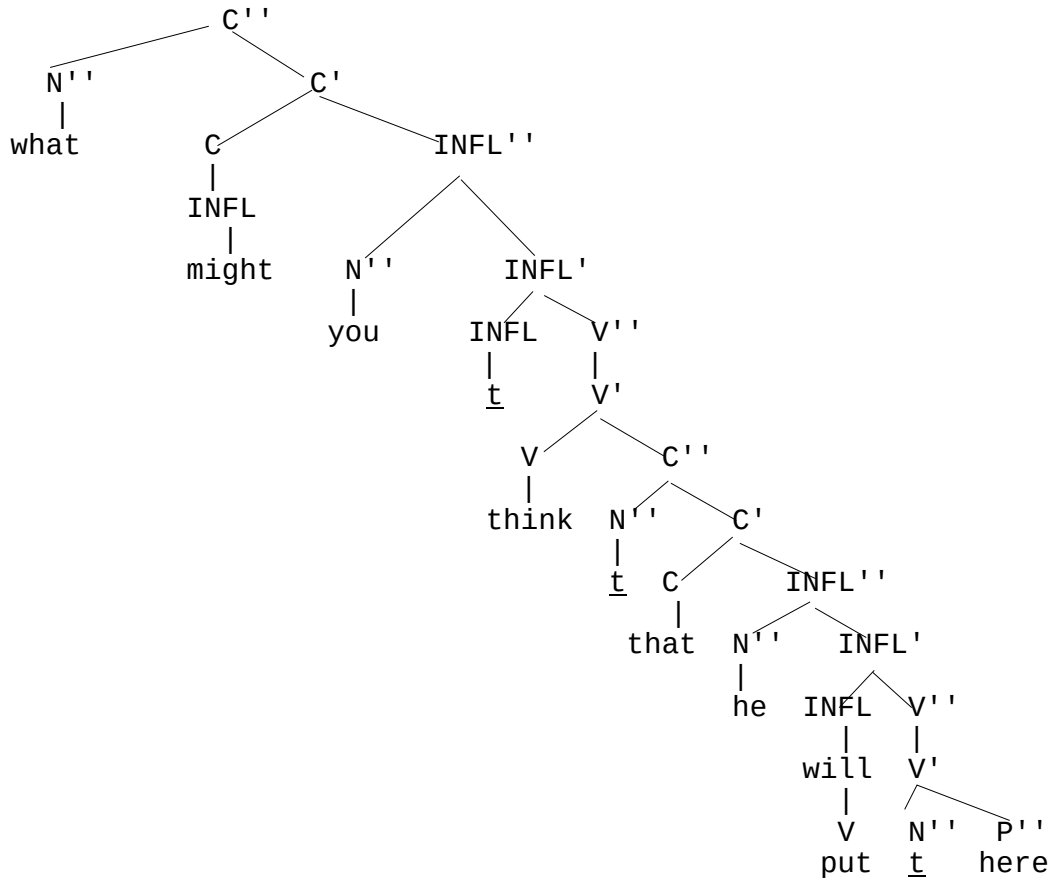


Evidence for this analysis is provided by a phenomenon known as the WH-Island Constraint (discovered by Chomsky in the very early 1960's): unlike an embedded declarative, an 'embedded question' does not permit extraction out of it:

(2) What might [you think [that [he will put t here]]]
(3) *What$_1$ might [you wonder [where$_2$ [he will put t_1 t_2]]]

If we assume that apparent long distance movement, as in (2), is actually the result of a sequence of short movements, then the SPEC of CP analysis of WH-Movement provides an immediate analysis of (2) vs. (3). In (3), the SPEC of the lower C'' is filled (by where) so it is not available as an escape hatch from the lower clause. But in (2), the lower SPEC of CP is available.

(2')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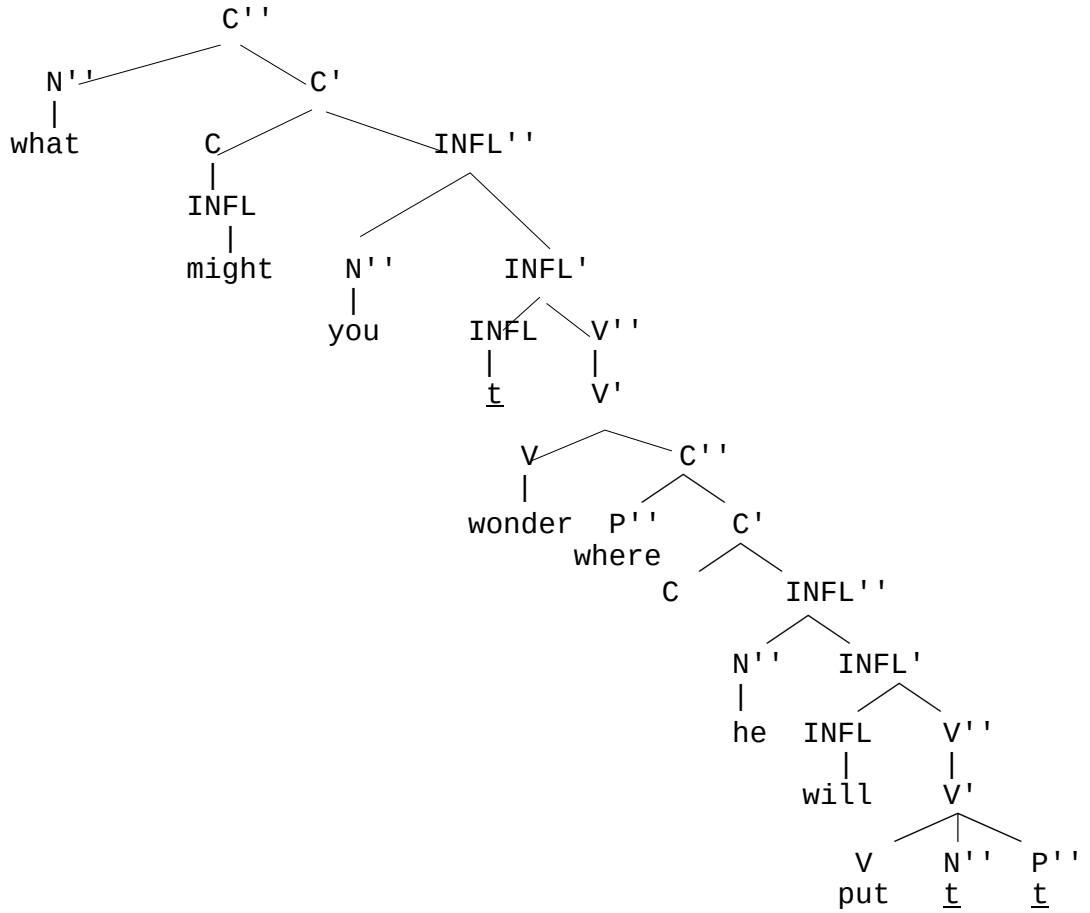
(3')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We can state the requirement in the following way:

(4) One step of movement cannot 'cross' 2 IPs. [One instance of what Chomsky (1973) called 'subjacency', though Chomsky in that work used SSC and TSC to rule out this example, mainly because he had the larger clause node - now CP - as the relevant bounding node. Chomsky (1977) discusses the potential effects of making the smaller clausal node - now IP - one of the bounding nodes.]

Then, the well-formed derivation in (2') must involve 2 steps, each of them only crossing only one IP.

Topicalization is another transformation that conforms to this constraint, as shown by the contrast between (5) and (6).

(5) This book, I think that he will put t here
(6) *This book, I wonder where he will put t

This is particularly interesting because it indicates that a topicalized constituent must use the SPEC of CP to exit from an embedded sentence, even though the place where the topic comes to rest is not SPEC of the higher CP. This can be seen in examples of embedded topicalization like (7) or (8).

(7) Mary thinks that this book, I will like t
(8) Mary thinks that this book, I should say that I like t

Chomsky subsequent to (1973) also used subjacency to account for the unacceptability of extraction out of a subject by replacing CP by IP in the list of bounding nodes (and keeping NP, which he already had in the list).
(9) *Who did [[stories about t] appear in the newspaper]

(10) One step of movement cannot 'cross' 2 bounding nodes, where the bounding nodes are IP and NP.

Chomsky (1986) was concerned with the stipulative nature of the list of bounding nodes and with the fact that all else equal, (10) falsely predicts that not just subjects but objects are 'islands'.

(11) Who did [you read [stories about t]]

To solve these problems, he proposed instead (I simplify slightly) that ALL XPs are potentially 'barriers', but that an XP that is the complement of a lexical head (V, N, A, maybe P) is not a barrier. This gives the subject-object asymmetry noted just above, since object is complement of V. This new 'Barriers' theory also accounts for the observation of Huang (1982) that extraction out of 'adjuncts' (including adverbial modifiers) is barred:

(12) *Who did you go home [because Mary mentioned t]

Adjuncts, by definition, are not complements of lexical heads. A few problems still remain. First, since IP is usually not the complement of a lexical head, it ought to be a barrier. But then, if subjacency prohibits movement across even one barrier (as Chomsky conjectures), then WH-movement would be blocked altogether:

(13) Who [$_{IP}$ t left]

So Chomsky exempts IP (rather ironically, since it was one of the original bounding nodes, though we are already familiar with another IP exemption). Another obvious problem is that extraction of anything out of VP ought to be blocked, since VP is not the complement of a lexical head. Now things get tricky. Chomsky proposes that an item can escape from a barrier by adjoining to it. Metaphorically, adjoining to a category gets a moving item part way out. Ah, but now, why are there ANY subjacency effects? Adjunction should void all barriers. Chomsky proposes that adjunction to arguments is illicit (based, somehow, on the θ-criterion); and adjunction to an adjunct is prohibited, well, because it is.

The final question is the hardest: What about Chomsky's original island constraint, the WH-island constraint? We have exempted IP; and the embedded CP in (3) is the complement of wonder. So there now aren't any barriers for the movement of what. The answer to this question, unfortunately, goes well beyond the simplified version of the Barriers theory I have summarized here. To see how it really works, you will have to look at Barriers and/or the summary of the Barriers framework in Move α (pp. 69-73). We will be discussing this in detail.

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