

D-linking and *Wh-in-situ*

Some reading notes relating to Pesetsky (1987).

1 Reading notes for Pesetsky (1987)

“S-structure” refers essentially to “surface structure,” which is the state of the syntactic tree as it is pronounced. This is to be compared with “LF” (“logical form”), which is the state of the syntactic tree as it is interpreted by the semantic module of language. This paper can be seen in part as an argument for the existence of certain movement operations that happen derivationally after the point at which the pronunciation is determined (S-structure) but before interpretation.

“Comp” is another name for C, though it is sometimes also used in a way that is more like the specifier of CP. So a *wh*-phrase that “has not visibly moved to Comp” is one that has not visibly moved into the specifier of CP.

You can consider “the Q morpheme found in the Comp of interrogative clauses” to be an (interrogative) C.

1.1 Scope and movement

1.1.1 Multiple questions in English

The “scope of a *wh*-phrase” is the CP of the question with which it is interpreted—the idea is that when you move a *wh*-phrase into the specifier of CP, it “takes scope” or “has scope” over the stuff it c-commands. The idea might be most clearly described through examples.

- (1) John said [that Mary bought a book].
- (2) John wondered [what Mary bought *t*].
- (3) What did John say [that Mary bought *t*]?

In (1), we have one declarative statement embedded inside another one. This is for comparison purposes. In (2), the embedded clause has been changed into a question. John is wondering what the answer to the question “What did Mary buy?” is. The *wh*-word in (2) is said to “take scope” at the embedded CP. In (3), the whole thing is a question, and the *wh*-word has moved out of the embedded clause and up to the top of the main clause. In (2), the *wh*-word takes scope at the “matrix” (a.k.a. “main”, a.k.a. “top”) clause.

In the discussion of (4), Pesetsky points out that the last *wh*-word, *what*, seems (on the basis of the interpretation) to be able to take either embedded or matrix scope. When *what* takes embedded scope, it joins the overtly moved *wh*-word *where* and makes the embedded question about both *what* and *where*—the whole thing winds up being a question about who knows a list of things, the list of pairings of things and places where the things were bought. On the other interpretation, where *what* takes matrix scope, it instead joins the *wh*-word *who* and makes the whole question about pairings of people and things.

(4) Who knows where we bought what?

The idea Pesetsky is attributing to Baker (1970) is that the scope that an unmoved *wh*-word (like *what* in (4)) takes is just simply marked on the *wh*-phrase: it gets a subscript (“index”) that matches the one on the C the *wh*-word associates with. To differentiate the two indexing possibilities for *what*, Pesetsky refers to the “wide scope” interpretation (where the *what* takes scope in the matrix clause, thereby c-commanding a wide domain) and the “narrow scope” interpretation (where the *what* takes scope in the embedded clause, thereby c-commanding a much smaller domain). These terms (“wide scope,” “narrow scope”) are commonly used in this way (both for *wh*-words and for quantifiers).

1.1.2 Indefinites

An “indefinite” here means something like *a man*, or *someone*. These are often in simple sentences translated into semantics with something like “there is...” (as in: *A man arrived* = ‘there is an x such that x is a man and [x arrived] is true.’). However, the point that Pesetsky is making (following Heim) in this section is actually that indefinites don’t *always* have a “there exists...” meaning—that the “there exists” part of the meaning of a sentence with an indefinite in it does not come directly from the indefinite itself, but from some kind of default interpretation rule. And when there is another quantificational item in the sentence (like *sometimes* or *usually*), this “there exists...” meaning is replaced by the kind of meaning contributed by the quantificational item.

“Extraction” is another word for “movement.”

An “unselective binder” is to be compared with a “selective binder.” Consider the quantifier phrase *every boy* in the sentence “Mary saw every boy.” The semantic interpretation of this is something like “for every boy x , [Mary saw x] is true.” The assumption is usually that the quantifier phrase *every boy* is moved syntactically, after S-structure and before LF, to adjoin to IP. The trace of this movement is interpreted as a “variable,” the x in “[Mary saw x].” *Every boy* is said to bind this variable, because the referent of x is controlled by the quantifier phrase—it goes through all the boys in turn, assigns the current boy to be x and then checks to see if “[Mary saw x]” is true. This binding relationship

is *selective* because the quantifier phrase will bind only variables that are “co-indexed” with it (a moved element and its trace share the same index). It will not just bind any old variable, it binds only its own. An “unselective binder” is one that binds any old variable.

That being said, Baker’s Q is not *really* an unselective binder, I think that’s basically an error in this paper. Q selectively binds the *wh*-phrases it is interpreted with, and ignores any others.

1.2 Superiority effects as a diagnostic for movement

1.2.1 Nested dependencies

A “dependency” is pretty much like a “chain” except that it is more non-committal about whether the relationship (e.g., between a moved *wh*-word and its trace) arises by movement. Nevertheless, the use to which it is put here (in the “Nested Dependency Condition”) specifically mentions the trace of movement, and so the relevant dependencies are *movement* dependencies.

The “Nested Dependency Condition” has roughly the same effect on trees that we get by building the tree from the bottom up, and saying that movement has to be as short as possible. I’ll leave it to you to work that out in your heads.

1.2.2 Absence of expected Superiority effects

“Non-D-linked *wh*-phrases are quantifiers and adjoin to S' ”: The first part of this is explained in the section, but by “adjoin to S' ,” Pesetsky means what we would call “moves to the specifier of CP.”

1.3 Move *Wh* in a language without *wh*-movement

(This is neither here nor there, probably, but the title of this section is actually the name of a paper by Jim Huang, Huang (1982), where the “LF-movement” analysis of *wh*-words *in situ* was first explored in detail.)

We can think of the “Subjacency Condition” as essentially being the requirement that movement not escape islands. The idea that “Subjacency does not apply at LF” is one where movement, so long as it happens after S-structure, is free to escape islands.

1.3.1 Forcing a non-D-linked reading

1.3.2 Subjacency violations and D-linked *wh*-phrases

“...these facts immediately suggest pied-piping.” What is meant by this is that the fact that the whole island needs to be “recapitulated” in the answer is kind of like having to

move “’s book” along with *who* when you ask “whose book fell?” or being able to move a PP like *at whom* along with *who* in *At whom did you yell?*—basically “pied-piping” means “pulling extra stuff (other than what motivates the movement) along.”

1.3.3 Results

1.4 East European

1.5 D-linking

1.6 Finishing touches

“Cliticize” here means to phonologically attach (which means that there needs to be something there to attach to).

1.7 Conclusions

2 The homework

Never mind. Think about possible project topics and find related papers, maybe on the readings page for the course.

References

- Baker, C.L. 1970. Notes on the description of English questions: The role of an abstract question morpheme. *Foundations of Language* 6: 197–219.
- Huang, C. T. James. 1982. Move WH in a language without WH movement. *The Linguistic Review* 1: 369–416.
- Pesetsky, David. 1987. Wh-in-situ: Movement and unselective binding. In Eric Reuland & Alice ter Meulen (eds.) *The representation of (in)definiteness*, 98–129. Cambridge, MA: MIT Press.