What's so Special about D-Linking?

Rebecca Shields University of Wisconsin-Madison

Since Pesetsky 1987, it has been recognized that D-linking does funny things. In particular, some D-linked questions are exempt from certain otherwise strict conditions on wh-question formation. The analyses of Pesetsky 1987 and 2000 capture the facts; however, the underlying reason for the exceptional behavior remains mysterious. In this paper, I propose a new analysis of D-linking, based on the theory of specificity of Enç 2007, which allows us to solve the mystery. On my proposal, D-linked wh-phrases are no longer an unexpected quirk – instead, their syntactic behavior follows straightforwardly from their grammatical properties. The proposal supports the feature-movement approach in Pesetsky 2000 over the unselective binding approach of Pesetsky 1987.

Background: Pesetksy (1987) observed that D-linked wh-phrases do not obey certain syntactic locality constraints. For example, English questions with D-linked wh-phrases can exceptionally violate Superiority (1-2). Pesetsky proposed that although ordinarily wh-in situ phrases must raise covertly to Spec, CP, D-linked wh-phrases are exempt from this requirement: they may (optionally) take scope via unselective binding by the Q operator in C. Pesetsky (2000) noticed another type of unusual behavior for D-linked wh-questions in English: Intervention effects of the type described for e.g. German and Korean in Beck 1996 surface in English as well, but only in the case of D-linked wh-questions violating Superiority (3-4). In the Pesetsky 2000 analysis, the exceptionality of D-linked wh-phrases is tied to their ability to (again optionally) take scope via feature movement, in either the overt or covert component of the grammar, rather than the phrasal movement which is generally required for ordinary wh-phrases. The facts are captured by his multiple specifier rules (5). Because D-linking allows an exception to (5b), movement of the wh-feature associated with *which person* in (2b) may take place (with no phonological result) in the overt component of the grammar, prior to the overt phrasal movement of *which book*, satisfying Superiority but resulting in an apparent violation of Superiority on the surface. And in exactly this case, when feature movement is forced in order to avoid a Superiority violation, an operator-variable split construction is created at LF, and an Intervention effect ensues if negation intervenes (4b).

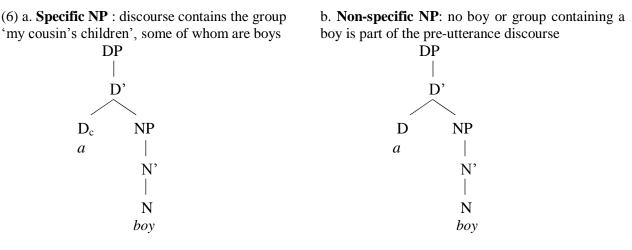
Pesetsky's approaches certainly account for the data, but the exceptionality of D-linking remains essentially stipulative in both cases. Why should D-linking be an exception to the rules? And why, in particular, should D-linked phrases be able to take scope in the precise manner proposed, involving either unselective binding or feature movement? What, in other words, is so special about D-linking?

Proposal: I explore an analysis which answers these questions, grounded in the syntax of specificity of Enc 2007. A "specific" argument is one that overlaps (partially or entirely) in reference with some discourse referent (Enç 1991). Enc (2007) argues that this overlap is encoded in the syntax: specific arguments bear an index on D which identifies the set of individuals of which the argument is a member (6a). Non-specific arguments have no such feature on D (6b). I extend Enç's theory of nominals to wh-phrases, resulting in the syntax in (7): D-linked wh-phrases are specific, and therefore have a set-denoting index on D. If the D-linking index actually originates on the wh-feature in D, feature movement from a D-linked wh-phrase will raise the index to C along with the feature. By contrast, feature movement of a non-D-linked wh-phrase will not piggyback an index. The deeper reason for (1-4) then becomes clear, if we make a slight modification to Pesetsky's rules in (5): instead of a requirement that multiple wh-questions have multiple specifiers (5), I propose instead that multiple wh-questions require multiple restrictions for the wh-operator in C (8). A D-linked wh-phrase in a multiple wh-question has two ways to get a restriction to the C projection in order to satisfy (8b): phrasal movement of the entire DP, or feature movement of the wh-feature in D along with the D-linking index. (In a single wh-question, overt phrasal movement is forced regardless of D-linking status, due to the EPP feature on C.) But a non-D-linked wh-phrase has only one way to get a restriction to C: phrasal movement of the entire NP, due to the lack of a set-denoting index on D. Adoption of an Enç-inspired syntax of D-linking thus provides a very natural motivation for its renegade status, while at the same time allowing us to preserve with only slight modification the theory of wh-movement and wh-in situ of Pesetsky 2000.

(1) a. Who_i did you persuade e_i to read what?

(1-2: Pesetsky 1987)

- b. *What_i did you persuade who to read e_i?
- (2) a. Which $person_i$ did you persuade e_i to read which book?
- b. Which book_i did you persuade which person to read e_i?
- (3) Who didn't read what?
- (4) a. Which person didn't read which book?
- b. *Which book didn't which person read?
- a. single wh-questions require one wh-specifier (based on Pesetsky 2000)
 b. multiple wh-questions require more than one wh-specifier (except for D-linked wh-phrases)



c = 'my cousin's children', e.g. {Linda, Mark, Noelle, Peter}

(7) a. **D-linked wh-phrase** : discourse contains the group 'my cousin's children', some of whom are boys

b. **Non-D-linked wh-phrase**: no person satisfying the conditions of the question is part of the preutterance discourse



(8) a. single wh-questions require one restriction in the C projectionb. multiple wh-questions require more than one restriction in the C projection

References:

Beck, Sigrid. 1996. *Wh-constructions and transparent Logical Form*. Ph.D. dissertation, University of Tübingen. Enç, Mürvet. 1991. The semantics of specificity. *Natural Language and Linguistic Theory* 22:1-25. Enç, Mürvet. 2007. Untitled ms., University of Wisconsin-Madison. Pesetsky. David. 1987. Wh-in-Situ: Movement and Unselective Binding. In *The Representation of (In)definiteness*.

Pesetsky, David. 1987. Wh-in-Situ: Movement and Unselective Binding. In *The Representation of (In)definiteness*, Eric J. Reuland & Alice G. B. ter Meulen, eds. MIT Press: Cambridge, Mass.

Pesetsky, David. 2000. Phrasal Movement and its Kin. MIT Press: Cambridge, Mass.