Triggering Successive Cyclicity in Wh-Movement: An ‘Indirect Dependency’ Solution

Chomsky (2001) derives the successive cyclic property of movement from his ‘phase impenetrability condition’: a phrase must move to a phase’s specifier in order to be ‘visible’ for further steps of movement. With respect to long distance wh-movement (1), Chomsky suggests that each intermediate [-wh] C may have a ‘defective’ P feature which needs deletion but is unable to delete the set of features of the ‘goal’ - the moving wh-phrase (by analogy with ‘defective’ T, found in ECM constructions). Since the nature of the postulated P feature of C remains unclear at present, Chomsky’s proposal adds little to an explanation of the problem of motivating the successive cyclic property of wh-movement in the first place.

In this talk we advance an alternative proposal, and argue that successive cyclicity in wh-movement is epiphenomenal, so that the problem of motivating it does not arise. Specifically, instances of successive cyclic wh-movement should be reanalyzed as instances of residual wh-scope marking (WSM) of the Indirect Dependency (ID) type (Dayal 1994/96/2000).

WSM questions (2) trigger the same kind of answers as long-distance questions (cf. van Riemsdijk 1982, others). The most significant syntactic property of ID is that each clause of a WSM question is a local wh-dependency, headed by a [+wh] Comp. Stepanov (2000), working within ID, proposes a structure for Polish and Russian WSM questions (3), in which the wh-scope marker (kak) is initially Merged with the “embedded” interrogative clause, forming a constituent (4). Stepanov argues that the position of the wh-scope marker (kak) is the same as the position of the (usually silent) nominal ‘correlative’ in declarative sentences like (5). Horvath makes a similar argument for Hungarian. The correlative forms a constituent with the embedded finite clause (3).

We propose that the derivation of a long-distance wh-question (1) starts out as building a WSM structure. In particular, in (6) John likes who is built with a subsequent movement of who into the interrogative Spec-CP, as in Who does John like? This CP is Merged with an abstract wh-scope marker forming an NP which is later Merged with the V believe. The wh-scope marker then incorporates into the V (reanalysis) so that the CP becomes a complement of V (semantically, incorporation is realized via an absorption rule). The structure building continues until the higher C Attracts who from the lower Spec-CP (the +wh feature of who is interpretable, hence can be checked more than once).

Our proposal harmonizes with Müller and Sternefeld (1995) who analyze finite embedded clauses in general as attached to a (silent) correlative N heading an NP (‘NP-shell’), which may incorporate into a higher propositional verb. It follows that sentences with finite embedding(s) and WSM questions always have the same structure, in which the (matrix) predicate selects an ‘NP-shell’, rather than a CP. I provide additional evidence for the ‘shell’ hypothesis in both declarative and wh-scope marking sentences.

Several pieces of evidence support our proposal. First, we observe that (IDA type) WSM languages are languages without (overt or covert) long-distance wh-movement. In the present terms, those are languages where predicates do not allow for incorporation of the kind described above. Second, WSM is only possible with clauses (questions, relatives, cf. McDaniel 1989) with finite embeddings, but not infinitival clauses, in other words, precisely in the contexts where successive cyclicity supposedly obtains (here we follow Bošković (1997) according to which (complementizerless) infinitival complements are IPs, rather than CPs, hence do not support successive cyclicity). Third, an interesting case is provided by German, where the kind of clausal correlative es may or may not appear (7)(see also Höhle 1996); long wh-movement is possible in some dialects, and only when es does not appear (8); most German dialects allow WSM (9). This makes sense if the incorporation is optional in German, so that if no incorporation takes place, WSM is available, in which the wh-scope marker originates in the position of es.

Our ID-based proposal is superior over previous analyses which equated WSM with successive cyclic structures (e.g. McDaniel’s 1989), since it provides a natural explanation for why the (contentful) wh-phrase stops by in the “intermediate” Spec-CP (namely, because it is in fact an interrogative CP, under the ID approach). Another virtue of our proposal is reducing cross-linguistic variation essentially to lexical properties of verbs (in terms of their incorporation ability) and bringing apparently diverse constructions under one conceptual umbrella.
EXAMPLES

(1) Who does you believe (that) John likes?

(2a) jaun kyaa soctaa hai ki merii kis-se baat karegii [Hindi, Dayal (1994)]
John what think PR that Mary who talk-do
‘What does John think, who will Mary talk to?’

(b) Who does John think that Mary will talk to?

(3) Kak vy dumaete, kogo ljubit Ivan? [Russian, Stepanov (2000)]
how you think whom loves John
‘Who do you think John loves?’

(4) vy dumaete [XP kak [CP kogo ljubit Ivan]]?
you think how whom loves John

(5) Ivan utverždal (to) čto zemlja ploskaja
John maintained COR that earth flat
‘John maintained that the earth is flat

(6) [CP who John likes t]
[VP believe [NP SM [CP who John likes t]]]
SM=wh-scope marker
[VP believe [CP who John likes t]]

(7) Hanna hat (es) oft gesagt, daß es dort regnet [German]
Hanna has it often said that it there rains

(8) Wen glaubst du (*es) daß sie liebt?
Who believe you it that she loves
‘Who do you believe that she loves’

(9) Was glaubst du wen sie liebt?
What think you who she loves
‘What do you think, who does she love?’

SELECTED REFERENCES