The Proper Role of Movement and Ellipsis in Discontinuous Coordination

In "discontinuous coordination" constructions with *both...and* and *either...or*, *both* and *either* are generally taken to mark the left edge of the first conjunct. However, as is well known, these elements (collectively referred to here as C1) may appear displaced from this expected position in sentences such as (1).

Two types of analysis of sentences like (1) have been proposed. The first, advocated by Schwarz (1999) (and to a lesser extent by Han and Romero (2004)), involves ellipsis in the second conjunct along the lines of "conjunction reduction" (Lakoff and Peters 1969), illustrated in (2-a). The second, advocated by Larson (1985) and Den Dikken (2006), involves movement of C1 from its base-generated position at the left edge of the first conjunct, illustrated in (2-b). Several pieces of evidence suggest that the conjunction reduction account of left-displacement of C1 is true of DPs but not of sentences.

First, since they contain two separate occurrences of the relevant structure, reduced structures like the one in (2-b) have the potential to allow "mixed" readings with respect to the *de se*/*de re* distinction (Chierchia 1989; von Stechow 1982). (3) does not have a reading in which John's belief about himself is *de re* with respect to winning the election but *de se* with respect to marrying a model. This fact is evidence not only that there is a structure other than (3-a) for sentences with left-displaced C1, but also that the reduced structure is actually *unavailable* for these sentences; otherwise, the relevant reading would be accessible. (4), on the other hand, *does* have a reading in which John's belief is about a dissertation he does not remember writing and a memoir that he does remember writing. Thus, the conjunction reduction structure must be available for DPs but is not available for sentences.

The unavailability of the mixed reading of (3) is due neither to a general constraint against mixed readings of coreferential pronouns in a single sentence (since (5-a) has the mixed reading) nor to a general constraint against readings of elided pronouns that are different from those of their antecedents (since (5-b) has the mixed reading). Rather, the mixed reading of (3) is unavailable because there is only one instance of the pronoun, which cannot be interpreted two ways simultaneously.

Second, the conjunction reduction analysis incorrectly predicts that the "scope" of coordination is always at least as high as left-displaced C1. Although counterexamples can be hard to construct, sentences with unexpectedly "low scope" are in fact attested, as in example (6-a) from the Treebank corpus. (6-a) is *not* truth-conditionally equivalent to (6-b), which represents the reading predicted by the conjunction reduction analysis; rather, the speaker is ambivalent as to whether the relevant activity takes place in the fall or in the spring. For DPs, however, this "low scope" is completely impossible; the Treebank corpus contains *no* examples like (7-a) with the meaning that John read everything that was either a book or a magazine; rather, (7-a) can only have the meaning represented in (7-b).

Finally, note that while coordination of subconstituents of a VP is perfectly acceptable, as in (8-a), coordination of subconstituents of a DP is not, as in (8-b) and (8-c). A movement analysis of left-displacement of C1 in DPs would be forced to make the unpalatable assumption that discontinuous coordination of NPs and APs is allowed only if C1 then moves to the left of the entire DP.

Both conjunction reduction and movement have their place in the analysis of left-displaced C1 in discontinuous coordination: conjunction reduction applies to DPs, and movement applies to full sentences.

(1)   John either ate rice or beans.

(2)   a.   John either [$_{VP}$ ate rice] or [$_{VP}$ ~~ate~~ beans] .
       b.   John either$_i$ ate t_i [$_{DP}$ rice or beans] .

(3)   John either thinks he will win the election or marry a model.

       a.   * John either [$_{VP}$ thinks he$_{de\ re}$ will win the election] or [$_{VP}$ ~~thinks he$_{de\ se}$ will~~
             marry a model] .
       b. # John either$_i$ thinks he will t_i win the election or marry a model.

(4)   John thinks both his dissertation and memoir will be published.

       a.   John thinks both [$_{DP}$ his$_{de\ re}$ dissertation] and [$_{DP}$ ~~his$_{de\ se}$~~ memoir] will be
             published.
       b. # John thinks both$_i$ his t_i dissertation and memoir will be published.

(5)   a.   John either [$_{VP}$ thinks the voters will elect him$_{de\ re}$] or [$_{VP}$ ~~thinks~~ a model will
             marry him$_{de\ se}$] .
       b.   John thinks he$_{de\ re}$ will win the election, and Bill does ~~think he$_{de\ se}$ will win the
             election~~ too.

(6)   a.   I either want to do it in the fall or spring. (Marcus et al. 1999, swbd/2/sw2248.pos)
       b.   I either [$_{VP}$ want to do it in the fall] or [$_{VP}$ ~~want to do it in the~~ spring].

(7)   a.   John read either every book or magazine.
       b.   John read either [$_{DP}$ every book] or [$_{DP}$ ~~every~~ magazine] .

(8)   a.   John [$_{VP}$ ate both [$_{DP}$ the rice and the beans]] .
       b. * John ate [$_{DP}$ the both [$_{NP}$ rice and beans]] .
       c. * John ate [$_{DP}$ the both [$_{AP}$ healthy and delicious] beans] .

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