Deriving Split-Antecedent Relative Clauses

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There is difficulty in representing relative clauses with split antecedents that bind reciprocal anaphors (cf. Perlmutter & Ross 1970, McCawley 1982, Link 1984, Wilder 1994), as in (1): linking the relative clause with a plural relativizer to two antecedent nominals, each in a separate clause. I show that both movement and base generation approaches to split-antecedent relative clauses (SARC) have difficulties, and provide an analysis using a novel system of representing narrow syntax that does not run into these problems. One crucial issue is that the typical empirical tests for diagnosing relative clauses, variable binding and Principle C effects, give conflicting results with SARC. **Principle C:** Principle C effects are alleviated in SARC, as in (2) (cf. Fox & Nissenbaum 1999). This follows from a non-head-raising approach. **Reconstruction:** There are examples in the literature where pronouns can be bound by a quantifier *inside* the relative clause. In (3), there is similar reconstruction with SARC, which follows from a head-raising approach. Possible analyses for SARC that utilize *head-raising* would be: A) a rightward movement/ extraposition account for the relative clause, B) leftward movement of the heads out of the relative clause (cf. Kayne 1994), or C) a Multidominance approach that shares the relative clause in a lower position (cf. McCawley 1982), or D) a deletion-under-identity approach (cf. Citko 2001). However, these options only account for the reconstruction data in (3) (A, B are otherwise problematic, see Baltin 2005). Non-head-raising analyses of SARC, such as a base-generation extraposition analysis or a Late Merger account for the relative clause (cf. Baltin 2005), only account for the Principle C alleviation, in (2).

Interestingly, the reconstruction example can *acceptably* be combined with the Principle C example, as in (4). It is mysterious how Principle C effects are alleviated at the same time as pronouns bound by a quantifier within the relative clause. The most promising remedy for the mystery is a combination of options C) and D): a deletion-under-identity approach (cf. Citko 2001), using Multidominance to merge the external head(s) of the relative clause to each parallel CP, with a reinterpretation of Principle C as a PF phenomenon rather than an LF phenomenon (see derivation in (5)). Even so, this promising account runs into a problem with respect to the pronounced coordination. *And* coordinates the two DPs as a (plural) head of the relative clause. But, instead of being pronounced as a DP coordinator, *and* is pronounced as a linker for the two matrix CPs, and also interpreted as one, shown by asymmetric c-command relationships between the two CPs, as in (6). Cf. Citko 2005, it seems that we want some *and*-phrase to antisymmetrically link the two CPs that are coordinated at the *top* of the tree, rather than using the lower *and* that links the multiply-dominated DP structure. Now, this requires a stipulation that <u>two</u> *and*s are present in the structure– that of the two DPs for the relative clause, and of the two matrix CPs. However, why is only one *and* pronounced (that of the CPs) and the second (of DPs) not pronounced? Very construction-specific stipulations are required regarding interpretation and pronunciation of the (one? two?) coordinated structure(s).

To resolve the coordination issue, it becomes necessary to allow for coordination at multiple levels of the clause, to account for the (pronounced and interpreted) CP coordination in the matrix clauses and the (interpreted) DP coordination in the relative clause. At narrow syntax, I propose that coordination of a matrix clause involves coordination of *every* grammatical object that is contained within the coordinated clauses, rather than a 'top-down' notion of coordination that links entire clauses at the 'top' with AndP. Cf. Gracanin-Yuksek (2007), where each XP within a set of coordinated clauses shares the lexical content of that XP. The ideas here differ substantially, however, in that *and* is present <u>at every level of the clause</u>, which <u>derives</u> the parallelism seen - here, at the CP level, to obtain (6) as well as at the DP level, to derive the shared argument status in the relative clause. Pronunciation rules for *and* give rise to the SARC pronunciation.

The SARC structure is not unique to relative clauses. Instead, a general notion of coordinating sets of grammatical formatives allows SARC to be derived from the same syntax as a host of other coordinated structures, all with *and* pronounced in different hierarchical places within the clause - even multiple times, as in *respectively* coordinations: *Bob <u>and</u> Mary met <u>and</u> married a man <u>and</u> a woman, respectively* - rather than requiring additional stipulated syntactic mechanisms. This system also resolves the Principle C/pronoun binding paradox because the single object at *narrow syntax* that derives a family of coordinated trees allows for PF and LF to select different trees for use. This makes possible an analysis where both Principle C (at PF) and pronoun binding (at LF) are possible, because the LF tree contains the constituent [*a man and a woman who know each other well*], and the PF tree splits the antecedent linearly to obtain the surface order in (1).

Crucially, both interface trees come from the *same* abstract structure at narrow syntax and no stipulations are required regarding movement or copying to obtain the collective interpretation.

Examples

(1) Mary met *a man* and John met *a woman* who know *each other* well.

(2) John gave her$_i$ an argument and Bob gave her$_i$ a linguistic judgment that (both) support Mary$_i$'s theory.

(3) Susan met a grad student of his and Mary met an undergrad student of his that every man saw get married to each other.

(4) The graduate students gave her$_i$ an argument of his$_j$ and the undergraduate students gave her$_i$ a linguistic judgment of his$_j$ that every professor$_j$ thought (both) supported Mary$_i$'s theory.

(5) Derivation for Deletion-Under-Identity Approach:

a. [[which man and which woman] know each other well]

Merge internal head

b. [a man and a woman [which man and which woman] know each other well]]

Merge external head

c. John knows [a man] and Mary knows [a woman] [which man and which woman know each other well]]

Merge [a man] to CP_1, [a woman] to CP_2, Multidominance

d. John knows [a man] and Mary knows [a woman] ~~[which man and which woman]~~ know each other well]]

PF Deletion-under-identity; pronounced linear order

d.′ John knows ~~[a man]~~ and Mary knows ~~[a woman]~~ [which man and which woman] know each other well]]

LF pronoun binding by the quantifier with the internal head, reconstruction

(6) Every child$_i$ met a man and his$_i$ friend met a woman who know each other well.

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