

THE PRENOMINAL ORIGIN OF RELATIVE CLAUSES

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Ideally, the different relative clause (RC) types found in the languages of the world (postnominal, prenominal, internally headed, free or headless, correlative) should be derivable from one and the same structure. If one were to take English-type, postnominal, relatives to (most closely) reflect the structure of merge, with prenominal ones (and others) derived from them, the [_{DP} D CP] plus Head raising analysis of Kayne (1994) is, as he notes, virtually forced by Antisymmetry.

In this presentation I will explore an analysis, also compatible with Antisymmetry, which instead takes prenominal relatives to more directly reflect the structure of merge for relative clauses, with postnominal (and the other types of) relatives derived from them.

This change of perspective finds some basis, I submit, in the more general observation that constituents found to the right of a head are possibly never *merged* there, but come to be there as a consequence of the head moving leftward past them.

The main evidence for this conclusion comes from a pervasive left-right asymmetry found cross-linguistically.

Quite generally, one finds across languages that to the left of a lexical head (N,V, etc.) the (unmarked) order of complements, modifiers and functional heads, is unique, while to the right of the head at least two possibilities are found; either the same order as that found to the left of the head, or its mirror image. Greenberg's (1963) Universal 20 partially exemplifies this state of affairs for head=N, and modifiers= Demonstrative, Numeral, and Adjective:

“When any or all of the items (demonstrative, numeral, and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite.”

Exactly, the same pattern is found with the order of different classes of attributive adjectives in relation to N (Hetzron 1978; Sproat and Shih 1988; Cinque 1994, 2000); with the order of different classes of (lower) adverbs in relation to V (Rakowski 1998; Pearson 2000; Cinque 1999,42f; Rakowski and Travis 2000); with the order of bare direct and indirect objects in relation to V (Blansitt 1973; Hawkins 1983,137; Lu 1998,chapt.7; Pearson 2000); with the order of different classes of adjunct PPs in relation to V (Boisson 1981; Cinque 2002; Hinterhölzl 2002; Schweikert 2003); and with the order of auxiliary verbs in relation to (the lexical) V (Koopman and Szabolcsi 2000; Nilsen 2003).

In Cinque (1996) I suggested that this left-right asymmetry could find an interesting account in Kayne's antisymmetric framework, which bans the symmetrical merge of modifiers both to the left and to the right of a head. In that framework, only the order compatible with a Spec-head-complement serialization is the order of merge, all other orders being derived from it via independent types of movement. In particular, I suggested that if we take the order of merge to be [_{XP}X [_{YP}Dem [_{YP}Y ... [_{WP}Num [_{WP}W ... [_{ZP}AdjP [_{ZP}Z [_{NP} N]]]]]]]], with the N(P) raising successive cyclically either by itself, or raising and pied piping the node immediately dominating it, the unique order to the left of the head follows, as follow the two orders to the right of the head.

This amounts to saying that the orders of modifiers found to the right of the N are a function of the head raising past them, merged in pre-head position. Similar considerations hold for the other instances of the same pattern noted above.

This also implies that it is the prenominal position of the relative clause that is the merge position and that the postnominal position is derived by leftward movement of the “Head” past it. I take the Head to be the extended projection of the NP which is immediately below the projection that hosts the relative clause (here, WP): [_{XP}Dem [_{XP} X... [_{YP} RC [_{YP}Y [_{WP} AP [_{WP}W ... [_{ZP}AP [_{ZP}Z [_{NP} N]]]]]]]].

In Cinque (2003), following Kayne's (2000, 2003) analysis of complementizers, I suggested that the trigger for the leftward movement of the "Head" is a property of the (finite) complementizer, which attracts the "Head" (the remnant) to its left, much like the complementizer of an object clause attracts the matrix VP (the remnant) to its left.

Prenominal RCs are predominantly, if not exclusively, found in ("rigid") OV languages. Now, if finite clauses need a complementizer to be licensed as arguments or adjuncts (Kayne 2003), and if complementizers typically have the property of attracting the VP or NP Head to their left, giving rise to V Clause or N Clause configurations, then they will not be able to appear in strictly Head- (V- or N-) final languages. It is thus natural that in such languages RCs, which can only be prenominal, should appear in a non-finite IP form. This implements in a different way Kayne's (1994, section 8.3) idea that prenominal RCs are bare IPs (which is a (robust) tendency more than an absolute rule, as there are (marked) cases of *finite* prenominal RCs introduced either by a clause-final or clause-initial complementizer).

An additional clue for the prenominal nature of RCs may come from languages like German, which alongside finite postnominal RCs has prenominal non-finite RCs. Since (as opposed to English non-finite reduced RCs) they are allowed only in prenominal position, in a system that derived them from a postnominal position, one would have to claim that the preposing operation is obligatory even when the non-finite clause is very heavy.

Concerning their location of merge, typological evidence seems to indicate that prenominal RCs are introduced between the numeral and the demonstrative, though the lower location between the numeral and functional adjectives is also an option, especially for reduced RCs, with apparent semantic implications.

The prenominal merge of the relative clause also appears to be compatible with both a "raising" and a "matching" analysis of the Head. This may prove a welcome result if both raising and matching must be available, as some facts discussed in the recent literature (if correctly interpreted) seem to indicate. Cf. Grosu and Landmann 1998; Sauerland 1998,1999,2003; Bhatt 2000; Aoun and Li 2003.

Finally, the prenominal merge of RCs will also be discussed in relation to the task of providing a unified structure from which to derive the different types of RCs mentioned at the outset (postnominal, prenominal, internally headed, free or headless, correlative).