



The Structure of Asymmetric Clausal Coordination

Rafael Nonato - nonato@mit.edu

Goodall (1987) analyses coordination as a post-syntactic phenomenon: trees that exist at parallel levels are “pasted together”, with the conjunction being inserted at PF. I concede that Goodall’s parataxis is the most economical account of symmetric coordination, that is, coordination where the order of the conjoints doesn’t matter to the computation of meaning—as in (1-a)/(1-b)—, but that kind of theory becomes unsatisfactory once we start considering cases of asymmetric coordination, that is, cases where the order of the conjoints does matter for the computation of meaning—as in (2-a)/(2-b). In asymmetric coordination, the semantic relation between clauses can be temporal (3-a), adversative (3-b), causal (3-c) or of logical consequence (3-d) (see Lakoff 1986, Postal 1998). Absolute adverbial constructions instance the same semantic relations, as shown in examples from (4-a) to (4-d). Stump (1985) argues that the computation of the semantic relation between an absolute construction the clause under which it is embedded can’t be simply a matter of inference. That seems to suggest that in asymmetric coordination there also has to be syntactic embedding.

Languages differ with respect to how much morphology they display in coordination. In some languages the conjunction is null, and as a result coordinated clauses look simply juxtaposed—though we may still notice between clauses so held together one of the semantic relations exemplified in (3-a)-(3-d). In English and most other Indo-European languages, though the coordinating conjunction is overt, it doesn’t inflect. Finally, in switch-reference marking languages (Haiman and Munro, 1983), coordinating conjunctions mark whether the subjects of conjoined clauses are the same or different—see examples (5-a) and (5-b) from Kisêdjê (Jê, Brazil).

In the most trivial scenario, different-subject conjunctions mark clauses with non-intersective subjects, whereas same-subject conjunctions mark clauses with exhaustively identical subjects. When the subjects of adjacent coordinated clauses are partially intersective, switch-reference marking languages split into two classes (see the papers in Haiman and Munro 1983). While some languages will always mark the coordination of two clauses containing non-exhaustively co-referent subjects with a different-subject conjunction, all of the languages that will employ a same-subject conjunction to coordinate clauses with intersective subjects, will only do so when the subject of the coming clause *contains* the subject of the preceding clause. Kisêdjê is a language of that kind (6). When the opposite relation holds, that is to say, when the subject of the preceding clause contains the subject of the coming clause, a different-subject conjunction is used universally (7). This one-way relationship of inclusion is the same found in Partial Control (PC): in PC the coming (embedded) subject can include the preceding (main) subject (8-a), but not the opposite (8-b) (see Landau 2001).



The semantic and binding similarities between coordination and subordination reviewed above seem to argue for discarding post-syntactic theories of coordination such as Goodall's 1987 in favor of a structured theory of coordination in the lines of Munn (1993). Note however that there *are* cases in which the order of the conjoints doesn't contribute any differences (symmetric coordination). Besides this semantic difference, those cases of coordination can have different morphology in languages of richer coordinative morphology. In (9), the special conjunction *nenhy* is used between the symmetrically coordinated clauses, rather than the expected same-subject conjunction *ne*. That is to say, in Kisêdjê, asymmetric coordination differs from symmetric coordination not only in terms of its semantics and binding properties, but also morphologically. I propose these symmetric and asymmetric coordination are different enough to merit different structures. A flat theory like Goodall (1987) would be adequate for cases of symmetric coordination, whereas a structured theory like Munn (1993) would suit cases of asymmetric coordination.

Postulating different structures for symmetric and asymmetric coordination could also be the beginning of an explanation for a puzzling difference between symmetric and asymmetric coordination: whereas extraction from symmetric coordination has to obey the Coordinate Structure Constraints (CSC, Ross 1967), it is possible to violate that constraint when extracting from asymmetric coordination (Postal, 1998). Compare the English examples (10-a) and (10-b) and the Kisêdjê examples (11-a) and (11-b).

Given a flat structure for symmetric coordination and an hierarchical structure for asymmetric coordination, an explanation for the contrastive extraction possibilities could proceed along the following lines: movement has to be simultaneously out of all clauses in symmetric coordination because of its parallel structure. The hierarchical structure of asymmetric coordination would allow for movement to proceed cyclically through the asymmetrically conjoined clauses.

- (1) a. John saw Bill and Mary cooked rice.
b. Mary cooked rice and John saw Bill.
- (2) a. Mary bought a car and Lucille wrecked it.
b. Lucille wrecked a car and Mary bought it.
- (3) a. Arthur sneaked in the basement and stole a bike.
b. A person can have 5 children and still stay sane.
c. Bodybuilders take drugs and become huge.
d. Frank criticized de Gaulle and hence criticized a Frenchman.
- (4) a. Having sneaked in the basement, Arthur stole a bike.
b. (Even) having 5 children, a person can still be sane.
c. Taking drugs, bodybuilders become huge.
d. Criticizing de Gaulle, Frank criticized a Frenchman.



- (5) a. hẽn [ø pãj] [=ne ø khu-ku] 'He_i arrived and (then) he_i ate it.'
INFL [he_{nom} arrive] [=AND.SS he_{nom} it_{acc} -eat]
- b. hẽn [ø pãj] [=nhy ø khu-ku] 'He_i arrived and (then) he_i* ate it.'
INFL [he_{nom} arrive] [=AND.SS he_{nom} it_{acc} -eat]
- (6) [aj khrãmtêjê mã akhija] [=ne aj ngre] 'They_i called their friends and they_i(+) danced.'
[they friends to call] [=AND.SS they dance]
- (7) [kare aj a-hwêtri khikhre nhihwêt] [=nhy karit aj ø -khãm a-mbraj] mã
[you_{erg} PL youABS-all house build [=AND.DS only.you PL it_{abs} -in you_{abs} -live] FUT
'All of you will build the house, and only you will live there.'
- (8) a. John_i prefers to PRO_i+_j meet at 6.
b. They_i+_j prefer to PRO_i to decide by himself_i.
- (9) [ropkasák na wa i-mã khĩni] [nenhy rop na wa i-mã sumba]
[dog INFL I_{nom} me_{acc} -to like] [AND jaguar INFL I_{nom} me_{acc} -to fear]
'I like dogs and I'm afraid of jaguars.'
- (10) a. This are the cookies that John sneaked in the store and stole t.
b. *This is the person who John likes Mary and hates t?
- (11) a. [wã.tã - n ka ø-khajtu] [-nh Canarana mã thẽ][=n a-mã kh.u- py]?
[what-FACT 2_{nom} 3_{abs} -order] [-ds Canarana LOC go] [-ss 2_{acc} -to 3_{acc} -get]?
'whati is such that you ordered him, he went to Canarana, and bought iti for you?'
- b. *[nhy m. bry = n Roptxi ra ita pĩ] [-nhy nuki ra kh.u- pĩ]?
[which animal=FACT R. NOM this kill] [-DS N. NOM 3_{acc} -kill]
'Which animal is such that R. killed this one and N. killed it?'



References

- Goodall, Grant. 1987. *Parallel Structures in Syntax: Coordination, Causatives and Restructuring*. Cambridge: Cambridge University Press.
- Haiman, John, and Pamela Munro, ed. 1983. *Switch-Reference and Universal Grammar*. Amsterdam: John Benjamins.
- Lakoff, George. 1986. Frame Semantic Control of the Coordinate Structure Constraint. In *Papers from the Parasession on Pragmatics and Grammatical Theory*, ed. Anne M. Farley, Peter T. Farley, and Karl-Erik McCullough.
- Landau, I. 2001. *Elements of Control: Structure and Meaning in Infinitival Constructions*, volume 51. Springer.
- Munn, Alan. 1993. Topics in the syntax and semantics of coordinate structures. Doctoral Dissertation, University of Maryland at College Park.
- Postal, Paul Martin. 1998. *Three Investigations of Extraction*. The MIT Press.
- Ross, John Robert. 1967. Constraints on variables in syntax. Doctoral Dissertation, MIT.
- Stump, Gregory Thomas. 1985. *The Semantic Variability of Absolute Constructions*. Dordrecht: D. Reidel Publishing Company.