Gapping as coordinate ellipsis?

Ross (1967, 1970) coined the term "Gapping" to refer to the elision of the finite verb in sentences like (1a). Because of the unacceptability of data like (1b), Gapping is usually taken to be restricted to coordinate structures. To quote Johnson (2006, 407): "A more-or-less standard criterion is that

- (1) a. Some ate beans and others ate rice.
 - b.*Some ate beans because others ate rice.

Gapping occurs only in coordinate structures." Even though there are well-known exceptions "The two main candidates that don't meet this requirement, but which nonetheless superficially appear to be instances of Gapping, are list-like answers [...] and comparative constructions [...]," those cases are usually simply set aside —"Many treatments of Gapping —most modern ones—leave these cases out, and so shall I in what follows" (Johnson, 2006, 408).

In this talk, I take a more traditional stance. I will argue that if we do not take those cases into consideration, we will miss an important generalization: It is not the *syntactic* notion of coordinate structures that is relevant to the distribution of Gapping (and, thus, all accounts based on ATB-movement are probably build on sand), but it is a *discourse structural* one.

The fact that Gapping is not restricted to coordinate structures in a strict syntactic sense is most obvious in German, where complementizers are incompatible with verb fronting. This tells us that the comparative conjunction *als* ("than") is subordinating in (2). Still, omission of *vertraut*—which is arguably not a case of comparative deletion, see Lechner (2004)— is fine.

- (2) Tom vertraut Michael mehr als Michael Tom vertraut Tom trusts Michael more than Michael Tom trusts
- (3) Wenn Michael Tom beschützt, dann beschützt auch Tom Michael If Michael Tom guards, then guards also Tom Michael

Data like (3) show that comparatives are not exceptional in this respect, for Gapping is also licit in conditionals (given certain circumstances, see Schwarz, 1998; Romero, 2003).

If we agree on the fact that (2) and (3) are instances of Gapping, then (2) and (3) clearly falsify the claim that Gapping is restricted to syntactic coordination. In fact, the coordinating conjunction *denn* ("for") indicates that this restriction is neither sufficient nor necessary:

(4) *Michael beschützt Tom, denn Tom beschützt Michael Michael guards Tom, for Tom guards Michael

However, as we saw above in (1b), Gapping does not apply freely either. So what is it that draws the line between (4) and (1b) on the one hand and (1a), (2) and (3) on the other hand?

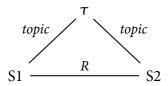
Work on discourse structure (see e.g. Asher and Lascarides, 2003; Asher and Vieu, 2005), tells us that the conjuncts in (4) and (1b) are lumped together by a discourse relation called *explanation* (explicitly denoted by *because* and *denn*), which gives rise to subordinating effects in discourse. (1a), (2) and (3), on the other hand, are (usually) taken to refer to the coordinating discourse relations *contrast*, *comparation* and *result*, respectively. This strongly suggests that the relevant notion of coordinate structure is not a syntactic, but a discourse structural one.

However, if we want to substantiate this claim, we need some independent and clearcut criteria to determine in a given case whether the relevant structure is coordinating or subordinating in discourse. To this effect, Asher and Vieu (2005) proposed four criteria, primarily based on the behavior of anaphora in discourse, the presence of other discourse relations, and the assumption that coordinating and subordinating discourse relations do not cooccur. I will argue, however,

that these tests —maybe with the exception of one— are either circular (we want to explain the behavior of anaphora by invoking the coordination/subordination dichotomy) not feasible (e.g., how do we know that *continuation* is present), or strongly theory-dependent.

Is there any reasonable alternative? —Yes, I think so. In this talk, I will suggest that the syntactic characteristics of coordinate structures determine the syntactic notion of coordination, while the semantic characteristics determine the discourse structural one. —But what are the semantic characteristics of coordination? According to Lang (1977, 1991) it is the fact that all conjuncts in a coordinate structure fall under a common concept, the *common integrator* (CI). This concept may be verbalized as a noun like *parents* in cases like *mother and father* or as a *wh*-interrogative like *who trusts who* in cases like *Michael trusts Tom and Tom (trusts) Michael*.

This, however, gives us a sufficient (and probably also necessary) condition on coordinate structures in discourse: Two segments S1 and S2 are linked by a coordinating discourse relation, if(f) both relate to one and the same CI / discourse topic τ (see also Kuppevelt, 1995), see the following discourse structure:



In addition, it can be shown that it is straightforward to determine, whether in a given structure the above condition is met, or not, for discourse anaphors like *das* turn out to be sensitive to this distinction: Whereas the reference of *das* in (5) is uniquely determined (the whole assertion), *das* in (6) is three-ways ambigous (reference to either *S1* or *S2* or the *comparison*).

- (5) Frauen sprechen schneller als Männer denken können. Nein, *das* glaube ich nicht. women speak faster than men think can. No, *that* believe I not
- (6) Frauen sprechen schneller, weil sie intelligenter sind. Nein, *das* glaube ich nicht. women speak faster because they more intelligent are. No, *that* believe I not

Finally, I demonstrate that this test and the corresponding restriction do in fact draw the line between (6) and (1b) on the one hand and (1a), (2) and (3) on the other, and thus corroborate the claim that Gapping is coordinate ellipsis – although in a discourse structural sense. (Q/A-relations are somewhat special in that they directly instantiate the above topic condition.)

References

Asher, N. and A. Lascarides (eds.): 2003, *Logics of Conversation*. Cambridge: Cambridge University Press. Asher, N. and L. Vieu: 2005, 'Subordination and Coordinating Discourse Relations'. *Lingua* 115, 591–610. Johnson, K.: 2006, 'Gapping'. In: M. Everaert and H. van Riemsdijk (eds.): *The Blackwell Companion to Syntax, Volume I*, Blackwell Handbooks in Linguistics. Oxford: Blackwell Publishing, pp. 407–435.

Kuppevelt, J. v.: 1995, 'Main Structure and Side Structure in Discourse'. Linguistics 33, 809-833.

Lang, E.: 1977, Semantik der koordinativen Verknüpfung. Berlin: Akademie-Verlag.

Lang, E.: 1991, 'Koordinierende Konjunktionen'. In: A. Von Stechow and D. Wunderlich (eds.): Semantik – Ein internationales Handbuch zeitgenössischer Forschung. Semantics – An International Handbook of Contemporary Research. Berlin: De Gruyter, pp. 597–623.

Lechner, W.: 2004, Ellipsis in Comparatives. Berlin, New York: Mouton de Gruyter.

Romero, M.: 2003, 'Correlate Restriction and Definiteness Effect in Ellipsis'. In: *The Interfaces: Deriving and Interpreting Omitted Structures*, Vol. 61 of *Linguistik Aktuell*. Amsterdam: Benjamins, pp. 263–300. Ross, J. R.: 1967, 'Constraints on Variables in Syntax'. Ph.D. thesis, MIT.

Ross, J. R.: 1970, 'Gapping and the Order of Constituents'. In: M. Bierwisch and M. Heidolph (eds.): *Progress in Linguistics*. The Hague: Mouton, pp. 249–259.

Schwarz, B.: 1998, 'Reduced Conditionals in German: Event Quantification and Definiteness'. *Natural Language Semantics* **6**, 271–301.