

You are “*the only one*”...how far do we go in search for referents?

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Our starting point.

Our project builds on some findings by Crain, Ni and Conway (1994) on the different parsing strategies adopted by children and adults in solving ambiguities related to the phenomenon of “one-substitution”, exemplified by (1):

(1) *The big elephant is the only one that is playing guitar*

The ambiguity relies on the fact that *one* might substitute “the only (one)” with either (a) or (b):

(a) the only thing/animal;

(b) the only elephant (among elephants).

Crain et al.’s results seem to suggest that the adults’ parser is guided by a strategy of “minimal commitment”, which prefers the interpretation that has more chances to be true (i.e. (b)) to avoid costly and unnecessary commitments. On the contrary, children seem to adopt a strategy of “maximal commitment”, judging (1) true only in situation (a). This difference was interpreted in terms of “learnability”, in line with the Semantic-Subset principle (Crain and Philip, 1993).

Our project.

In this project we will focus mainly on the results with adults. As for this, we cast doubts in generalizing the observed adults’ behaviour in the experiment by Crain et al. We think that another possibility should be taken into account -namely- that the observed adults’ interpretation could be due to the presence of a scalar adjective (such as ‘big’) in the target sentence. The use of a scalar adjective in fact, may induce and favour a within-set comparison in adults (“big” among elephants). The argument proposed is thus that the strategy of “minimal commitment” observed in adults by Crain and colleagues may be (at least for those trials in which a scalar adjective was used) induced by the presence of a scalar adjective. As shown by eye-tracking studies by e.g. Sedivy et al. (1996) and Sedivy (2001) adults promptly consider the presence of a contrastive object and converge on the target item more quickly if the adjective used in the instruction relates to material or scalar properties (eg. “Pick up the *tall* glass” in a visual scene in which a “tall” and a “small” glass are present) than when it refers to properties that are frequently redundantly encoded, such as color adjectives. To support this claim, a questionnaire study with 60 Italian adults on the Italian equivalents of sentences like (1) -in which no scalar adjective was used- showed no evidence of a tendency towards a strategy of “minimal commitment” (Foppolo, in prep).

Our proposal aims at working out in detail opposing predictions with respect to the parsing strategies adopted in case of the phenomenon of “one-substitution” discussed above and to test them by means of an eye-tracking study. In particular, we will address the following experimental questions: how do adults (and children) resolve the ambiguity related to “one-substitution”?; may (linguistic, visual, etc...) context override/modulate adults (and children) parser’s default strategy? Two opposing predictions will be formulated – namely the ones which relate with the strategy adults (and children) will adopt, either a “minimal commitment” (Hp1) or a “maximal commitment” strategy (Hp2). A visual world paradigm with Tobii eye-tracker will be used with adults and may be extended to children. The results obtained with the proposed paradigm will either corroborate or refute Crain et al.’s findings about the ambiguity resolution in case of “one-substitution”. Furthermore, it will shed some lights on the role of linguistic and extra-linguistic context in modelling the parser’s preferences.