

## Different effects of focus in intra- and inter-sentential pronoun resolution in German and French

Saveria Colonna (University of Paris 8), Sarah Schimke (University of Osnabrück), Tiphaine Medam (University of Paris 8), & Barbara Hemforth (CNRS & University of Paris Diderot)

saveria.colonna@univ-paris8.fr

Anaphor resolution; Information structure; French; German

It is widely assumed that focused entities are more salient than non-focused ones. In line with this, experimental data have shown that an antecedent is particularly available for a pronoun in a subsequent sentence when it is focused (e.g., Foraker and McElree, 2007). Contrary to this evidence, in recent on- and off-line studies on intra-sentential anaphor resolution in French and German, referents in focus were consistently less accessible than non-focused ones. There is good reason to believe that the difference between the two studies is due to differences between intra- and inter-sentential pronoun resolution: A sentence such as (1) is a felicitous answer to the question: "Who has slapped John when he was young?". The aboutness topic is thus "slapping John when he was young". Binding a pronoun in the subordinate clause to "Peter" would imply a change in topic within the sentence, thus reducing intra-sentential coherence (see also Grosz, Joshi & Weinstein, 1983 for the one topic constraint within sentences). In other words, within a sentence, binding a pronoun to the topic (the non-focused referent) makes the sentence more coherent by keeping the sentence topic constant between the matrix clause and the subordinate clause. By contrast, between sentences, focusing a referent in a given sentence may be taken as a cue for an upcoming topic shift, thus establishing this referent as a potential topic of the following sentence. A pronoun in the following sentence may thus access a focused antecedent more easily because this antecedent has been introduced as a potential new topic.

In the present study, we tested ambiguous pronouns in structures that were identical to those used in the earlier studies on French and German, but in which the ambiguous pronoun and the potential antecedents were in different sentences. The interpretation of the ambiguous pronoun was assessed in three conditions: a baseline condition as in (2), a focused subject condition as in (3) and a focused object condition as in (4). Participants completed written questionnaires by filling a gap in a sentence following the critical sentence (e.g., "\_\_\_\_\_ was an apprentice" for the examples 2-4). The percentages of choices for the first noun (N1) as the antecedent of the pronoun are in brackets. Our results replicated the cross-linguistic difference already observed before between French and German with more N1 interpretations in German than in French. More interestingly, we observed a preference for the focused antecedent in both languages, which was consistent with our predictions. N1 was chosen significantly more often when N1 was subject and focused as in (3) than in the baseline condition (2) ( $t_1(48) = 3.02, p < .005$ ;  $t_2(26) = 3.31, p < .005$ ;  $t_1(36) = 2.97, p < .01$ ;  $t_2(26) = 2.14, p < .05$  respectively for German and French). N1s which were focused and object were numerically but not reliably more accessible than N1 in the baseline condition across languages. The opposite effect, i.e. an "anti-focus" effect, has been reported for the German and French equivalent of the intra-sentential pronoun ambiguity (1). The different function of focus within and across sentences can explain the pattern of results across experiments.

(1) It was Peter who slapped John when he was young.

(2) Pierre a giflé Jean. Il était à l'époque apprenti. (54,4%)

Peter hat Hans geohrfeigt. Er war damals Lehrling. (62,4%)

*Peter has slapped John. He was then an apprentice.*

(3) C'est Pierre qui a giflé Jean. Il était à l'époque apprenti. (58%)

Es ist Peter, der Hans geohrfeigt hat. Er war damals Lehrling. (71,7%)

*It was Peter who has slapped John. He was then an apprentice.*

(4) C'est Pierre que Jean a giflé. Il était à l'époque apprenti. (63%)

Es ist Peter, den Hans geohrfeigt hat. Er war damals Lehrling. (65,7%)

*It was Peter who John has slapped. He was then an apprentice.*

### References

- Foraker, S., & McElree, B. (2007). The role of prominence in pronoun resolution: Availability versus accessibility. *Journal of Memory and Language*, 56, 357-383.
- Grosz, B., J., Joshi, A. K. & Weinstein, S. (1983). Providing a unified account of definite noun phrases in discourse. In *Proceedings of the 21st Annual Meeting of the Association for Computational Linguistics*. Cambridge, MA, 44-50.