## Ellipsis, ATB-Extraction and Information Structure: What *aber* imposes but *und* can't

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In our talk we investigate 'across the board' (ATB) extraction in cases which contain Bare Argument Ellipsis (BAE) as second conjunct. BAE refers to cases of ellipsis usually containing negation or a focus particle such as *auch* ('too') with a single contrastively focused remnant phrase.

- *a. Der Polizist verfolgte den Dieb aber den Mörder nicht.* (CT) The policeman chased the thief but the-<sub>ACC</sub> murderer not
  - *b. Der Polizist verfolgte den Dieb aber nicht den Mörder.* (CF) The policeman chased the thief but not the<sub>-ACC</sub> murderer

As illustrated above, German BAE allows word order variation subject to information structural (IS) restrictions. Thus, the remnant nominal *Mörder* in (1a) has been analyzed as a contrastive topic (CT) whereas in (1b) it functions as a contrastive focus (CF) (Winkler 2005). Our main hypothesis is that ATB extraction out of BAE is subject to IS-restrictions resulting from the focus structure of the two conjuncts together with the semantico-pragmatic contribution of the coordinator.

We tested our hypothesis using a modified version (cf. Featherston 2007a) of the well established Magnitude Estimation (ME) paradigm (Bard et al 1996) for relative grammaticality judgements. The modified version uses a linear scale with two reference points rather than a magnitude scale. Two experiments testing the contribution of the coordinator und ('and') (Exp I) and aber ('but') (Exp II) were conducted. In both experiments we manipulated the position of the remnant phrase and the grammatical function of the extracted element. Both experiments contained the same non-elliptical control conditions (5-6). Thus each experiment included the following six conditions:

## Conditions:

 Ich weiß nicht welcher Polizist den Dieb verfolgt hat und/aber den I know not which-NOM policeman the-ACC thief chased has and/but the-ACC Mörder nicht.

murderer not.

2. ....welcher Polizist den Dieb verfolgt hat und/aber nicht which-NOM policeman the-ACC thief chased has and/but not den Mörder. the-ACC murderer. 3. ...welchen Dieb der Polizist verfolgt hat und/aber der which-ACC thief the policeman chased hat and/but the Kommissar nicht. detective not. Dieb der Polizist 4. ...welchen verfolgt hat und/aber nicht der which-ACC thief the policeman chased hat and/but not the Kommissar. detective. 5. ...welcher Polizist den Dieb verfolgt hat. which-NOM policeman the-ACC thief chased has Dieb der Polizist 6. ...welchen verfolgt hat. which-ACC thief the policeman chased hat

The results are as follows. While there were no differences between subject and object extraction in the non-elliptical control conditions at all we observed a significant difference between subject and object extraction with ellipsis in the two experiments. In Experiment I (aber-cases) we found a clear preference for subject extraction, thus conditions (1-2) were judged significantly better than (3-4). Further, there was a significant effect of word order: the remnant following nicht (conditions 2 and 4) was judged better than the opposite word order (conditions 1 and 3). In Experiment II (und-cases) a different picture emerged. Condition 4 was judged significantly worse than conditions 1-3, which did not differ from each other.

Our analysis is based on a movement plus deletion approach to BAE (Konietzko & Winkler 2007) where the remnant phrase is displaced before deletion takes place. We assume that in the CT case (cf. 1a) the remnant moves to a designated topic position (cf Frey 2004) whereas the CF case (1b) is realised via movement of the remnant to the left edge of vP where it receives a focus interpretation (cf. Molnár & Winkler 2007). The structures are schematically given in (3):

a. [vP<sub>TOP</sub> [Neg [vP<sub>FOC</sub> [ <del>VP</del> ]]] b. [[Neg [vP<sub>FOC</sub> [<del>VP</del> ]]] We propose that the extraction asymmetries reported above can be explained with recourse to the focus structure of the constructions under consideration. In particular, we argue that the reduced grammaticality we found follows from conflicting focus structures resulting from ATB-extraction of the *wh*-phrase and ellipsis in the second conjunct. Our analysis rests on independently motivated assumptions regarding information structure. First, without any context given, a contrasted element is focal rather than topical. Second, drawing on the abundant literature on concessive connectives (cf. Lakoff 1971, Blakemore 1989, among many others) we take contrast to be the basic semantic contribution of *aber* (cf. Sæbø 2003, Umbach 2005). Third, subjects generally tend to be realized as topics and not as foci. Given these assumptions the degraded grammaticality of conditions 3 and 4 is predicted with *aber*, as extracting the object renders the subject the contrasted element, hence focus. Conditions 1 and 3 are rated low, because according to our analysis the remnant occurs there in a topic position which conflicts with it being contrasted.

The results in the *und*-experiment where only condition 4 was degraded can be explained as a syntax-IS mismatch defined in terms of a parallelism constraint imposed on the information structural functions of the constituents. Thus, the subject remnant is in the focus position in the second conjunct which is in conflict with the corresponding subject in the first conjunct being topical after the object has been *wh*-extracted. In addition, the word order with the subject following *nicht* is independently dispreferred (cf. Featherston 2007b). In contrast to the *aber*-experiment, the results did not show any differences between conditions 1-3. Clearly, condition 3 does not contain any mismatches between syntax and IS. As the object has been *wh*-extracted and thus functions as the focus, the subject can easily receive a topic interpretation. Here, it also agrees with the subject remnant in the second conjunct which occupies the topic position. Conditions 1-2 were judged just as grammatical as condition 3. We attribute this to the dual nature of *wh*-subject-phrases which are focal due to their *wh*-status and topical due to their *subject*-status. This does not impose any severe restriction on the IS status of the other constituents.

To conclude, we have provided experimental evidence for the following points. First, ATB-extraction out of ellipsis is subject to information structural restrictions resulting from the focus structure of the coordinates. Second, the different behaviour of *und* and *aber* in our experiments strongly suggest that the term parallelism is best defined on the basis of information structural notions. Thus, the fine-grained distinctions in grammaticality which our experiments reveal shed new light on a phenomenon which would remain unnoticed under a purely introspective consideration.

## References

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