## German *ja* and *doch*: Common Ground Management and Interaction with Discourse Structure

The class of German modal particles (MPs) has been in the center of linguistic research for several years and though they are claimed to have a variety of functions, the majority of the research concentrates on their syntax and semantics (e.g. Thurmair 1989, Lindner 1991, Karagjosova 2004, Zimmermann 2011). In the current paper the interaction of modal particles with discourse structure is investigated, which offers insights into the way MPs can contribute to establishing coherence in discourse.

It is often claimed that MPs have a function with respect to common ground (cg) management (cf. Karagjosova 2004, Repp 2013), but it is never spelled out what this exactly means and what influence this has on the structure of discourse. To capture this appropriately, I argue that it is necessary to use a broader common ground model containing individual discourse commitments, as well as a table (cf. Farkas & Bruce 2009). Additionally, I assume that the cg contains a subset of salient proposition. Ja and doch, then, do not update cg since they both express that the respective information is already known – and thus already in the cg –, but they make it salient again. In two quantitative studies, it has been explored how MPs interact with discourse structure, as it is modeled in Rhetorical Structure Theory (RST, Mann & Thompson 1988). In a corpus of parliament speeches of the former German chancellor Helmut Kohl (126.000 word tokens), all sentences containing a modal particle (ja, doch, eben, halt, wohl and schon have been analyzed) were annotated for their discourse relations (DRs). Furthermore, as not all DRs are used with the same frequency, in three of the speeches (27.000 tokens) all sentences were annotated for their relations irrespective of the presence or absence of a MP. The distribution of DRs across these sentences served as a baseline for the analysis of the occurrence of MPs in particular relations. The results were confirmed by a subsequent lexical choice experiment.

Focusing on ja and doch, the statistical analysis of the observed frequency of occurrence of the particles in different relations revealed that ja and doch are not equally distributed over the relations (ja:  $\chi 2(19) = 189.6$ ; p < 0.001; doch:  $\chi 2(21) = 416.61$ , p < 0.001). Ja occurred significantly more often

than would be expected in discourse units that constitute Background and Evidence relations. It occurred significantly less often than expected in Elaboration relations, and with marginal significance less often than expected in Condition relations. Part of the results follow from the particles' semantics straight-forwardly, e.g. the fact ja is preferably used in the context of Background relations, i.e. when the speakers gives non-new information in the the satellite. By using ja, the speaker can mark his information as not new and therefore increase the effect of the relation.

Doch also expresses that information is not new, but additionally points to a potential conflict with other information by reminding the addressee of the respective proposition. The data from the corpus study shows that mainly the second meaning component was important for its distribution in discourse. Doch did not occur significantly more often in BACKGROUND, but rather in what Mann & Thompson call presentational relations' (i.e. JUSTIFY, EVIDENCE, MOTIVATION). Especially for these presentational relations, it becomes clear that speakers can exploit the common ground managing function of MPs by presenting information as uncontroversial and making it salient, and by this enhance the function a discourse unit has in a relation like EVIDENCE. Overall, MPs can be used to indicate to the addressee how a proposition that is asserted by the speaker is related to (an)other proposition(s) and anchor information in discourse structure in a certain way, e.g. by marking it as background information. The results of the empirical studies show for the first time how speakers can make use of these functions – sometimes by exploiting them – to structure discourse, enhance the function of discourse relations and thereby establish coherence. At the same time, it becomes clear that a broader model of common ground is needed to capture this function of MPs in discourse appropriately.

## Literature

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