

## Obligatory additives in Ga (Kwa) and German

**Summary** Additives are obligatory when their presupposition is satisfied in the context. Obligatory insertion of additives have been explained by the principle *Maximize Presuppositions* (*MP*, Heim 1991). Recently, an alternative mechanism has been claimed to be responsible for the obligatory insertion of additives: *Obligatory Implicatures* (*OI*, Bade 2016). We conducted a series of experiments in Ga and German testing the predictions of both theories. Our results reveal that the obligatory insertion of additives in both languages follows from the same mechanisms — *OI* — and thus point to its status as a universal mechanism in pragmatics.

**Theoretical Background** Additives are obligatory when their presupposition is verified by the context, as shown in (1). This has been explained by the *MP* principle, which postulates *presuppose as much as possible!* (Heim 1991, Percus 2006, Chemla 2008, a.o.).

(1) a. John came to the party. b. Bill<sub>F</sub> did, #(too).

By contrast, *OI* (Bade 2016, based on Krifka 1999, Saeboe 2004) proposes that the obligatory insertion of additives follows from a contrastive implicature which is the result of the mandatory insertion of a covert exhaustivity operator (*EXH*, Fox 2007), whose insertion is triggered by focus. *EXH* identifies the proposition  $\lambda w. \text{Bill came to the party in } w$  as the most informative in a given set of alternatives. Since the only salient alternative is (1a) and is not entailed by (1b) it is excluded by *EXH*. As a result, the discourse in (1) becomes contradictory, which is avoided by inserting the additive since it presupposes the alternative in (1a) to be true, which makes it inaccessible to *EXH*.

**Experiments** The two theories make divergent predictions as to where the insertion of additives is obligatory. **(1) Exhaustivity** According to *OI* but not *MP* the insertion of additives depends on whether *EXH* is present in the structure: if *EXH* is obligatory, then so is the additive. **(2) Negation** *MP* states that (2a) and (2b) are competitors since they have the same assertion but differ in what they presuppose, (2b) but not (2a) presupposes that somebody other than Bill came to the party. This presupposition is fulfilled in the context and thus (2b) should have to be used following *MP*. *OI* predicts (2b) and (2a) to be equally acceptable since the insertion of *EXH* is blocked and the additive thus not obligatory under negation.

(2) context: Mary came to the party.

a. It's not the case that Bill came to the party. b. It's not the case that Bill, **too**, came to the party.

We ran two sets of parallel experiments on the insertion of additives particles in Ga (Kwa) and German. The results show that additives are not obligatory under negation in Ga and in German. Their insertion furthermore coincides with strong exhaustivity effects in both languages.

**Conclusion** Our findings can be accounted for *OI* while pose challenges for *MP*. The results point also to a cross-linguistically stable process in pragmatics. We spell out an analysis of the obligatory insertion of "too" which captures that its insertion hinges on the pressure to block or cancel an exhaustivity implicature.

**References** • Bade 2015. *Obligatory Presupposition Triggers in Discourse*. PhD. • Heim 1991. Artikel und Definitheit. In *Semantik*. • Renans 2016. Modeling the exhaustivity effect of clefts: evidence from Ga and German. Proceedings SuB 20.