Cross-linguistic variation in pragmatics: Maximize Presupposition vs. Obligatory Implicatures in Ga (Kwa)

Introduction This paper presents an experimental investigation of the obligatory occurrence of additive markers in Ga (Kwa), an under-researched language spoken in Ghana, in comparison to previous studies on German. Experimental work in German has shown that the obligatory insertion of the additive particle *auch* 'also' is related to the mandatory occurrence of exhaustivity implicatures, captured by the principle of Obligatory Implicatures (**OI**) (Bade 2016). By comparison, data from Ga show that the presence of the additive particle is not related to this implicature but rather it is better accounted for by the principle of Maximize Presupposition (**MP**) (Heim 1991, among others). Thus, our results are in line with an analysis in which the obligatory marking of additivity has a different underlying mechanism in Ga compared to German.

Theoretical Background Additives are obligatory when their presupposition is verified by the context, as in (1).

(1)   a. John came to the party.   b. Bill did, #(too).

Recent accounts of MP (Percus 2006, Sauerland 2007, Chemla 2008, Singh 2011) assume presupposition triggers such as additives to be on a scale of presuppositional strength: the presuppositional items have to be used when their presuppositions are fulfilled in context, while their non-presuppositional counterparts implicate that the presupposition of the trigger does not hold. By contrast, OI (Bade 2016, based on Krifka 1999, Saeboe 2004) proposes that the obligatory insertion of additives, among others, follows from a contrastive implicature due to the mandatory insertion of a covert exhaustivity operator (Fox 2007) triggered by focused material marking the Question Under Discussion (QUD) (Roberts 1996). The obligatory implicature of (1b) is that Bill was the only person who came to the party. It conflicts with the context (1a), since *John came to the party* is not entailed by *Bill came to the party*. By inserting the additive, the sentence presupposes that another alternative is true, blocking exhaustivity. For MP, no contextual factors beyond whether a presupposition holds are predicted to play a role in the insertion of a trigger. By contrast, according to OI the insertion of the additive should depend on whether an exhaustivity implicature is made prominent in the discourse.

Methods & Design We tested experimentally the hypothesis that obligatory additives are related to the strength of exhaustivity in Ga (Kwa), and compare the results to previous experiments in German using a different methodology. Canonical SVO sentences in Ga have been shown to be less exhaustive than non-canonical *ni*-cleft sentences (Renans 2016). The hypothesis was tested using a 2x2 design fully-crossed: SENTENCE TYPE (2 levels: SVO, *ni*-CLEFT) and ADDITIVE (2 levels: ±ADD). The task was a felicity judgment task on a pen-and-paper questionnaire with a scale from 1 (unacceptable) – 7 (acceptable). Whereas MP predicts a main effect of ADDITIVE, OI predicts an interaction between ADDITIVE and SENTENCE TYPE. The additive should be more obligatory with the presence of the *ni*-CLEFT marking exhaustivity than with SVO sentences, according to OI.

Results & Conclusion   We ran a linear mixed effects analysis using the statistics program R. There was a significant main effect of ADDITIVE (β=1.47, SE=0.20, t=7.27, with a t above 2 indicating significance): the +ADD condition was overall more acceptable than the –ADD condition, parallel for both SVO and *ni*-CLEFTs. The factor SENTENCE TYPE and the interaction of the two factors did not reach significance (t<2 in both cases). In short, in Ga the strength of the exhaustivity triggered by the two sentence types did not align with the obligatory occurrence of the additive, unlike previous results for German. Comparing the results for both languages points to previously unattested cross-linguistic variation in pragmatics.

Ga: Acceptability Judgments
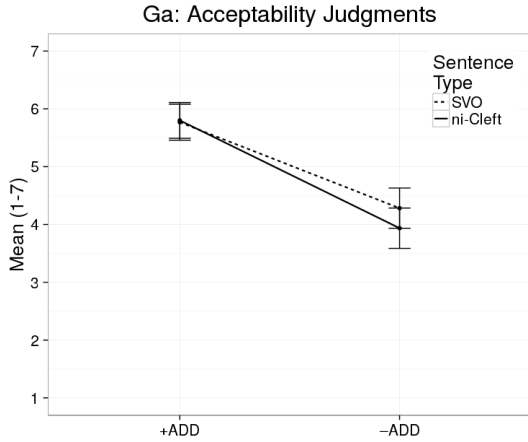
(2) i. Tɛtɛ ba   shia. **E-ye   banku**. **E-ye   blɔfoŋme hu**.
        T.   came home 3.SG-eat banku   3.SG-eat pineapple also

                                              [SVO, +ADD]

        'Tɛtɛ came home. He ate banku. He also ate pineapple.'
  ii. Tɛtɛ ba   shia. **E-ye   banku**. **E-ye   blɔfoŋme**.
        T.   came home 3.SG-eat banku   3.SG-eat pineapple

                                              [SVO, −ADD]

        'Tɛtɛ came home. He ate banku. He ate pineapple.'
  iii. Tɛtɛ ba   shia. **Banku ni e-ye**.   **E-ye   blɔfoŋme hu**.
        T.   came home banku   PRT 3.SG-eat 3.SG-eat pineapple also

                                       [*ni*-CLEFT, +ADD]

        'Tɛtɛ came home. It was banku he ate. He also ate pineapple.'
  iv. Tɛtɛ ba   shia. **Banku ni e-ye**.   **E-ye   blɔfoŋme**.
        T.   came home banku   PRT 3.SG-eat 3.SG-eat pineapple

                                        [*ni*-CLEFT, −ADD]

        'Tɛtɛ came home. It was banku he ate. He ate pineapple.'

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 (Kwa). Proceedings SuB 20.