
Experimental fieldwork at the semantics-pragmatics interface: Two case studies from West Africa

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We discuss experimental methods in West African fieldwork settings, drawing on two case studies of semantic experiments in Akan and Atchan. Our results suggest that experiments can be valuable in semantic fieldwork, though population-specific factors must be taken into account in experimental design (Matthewson 2022).

Akan experiment. We conducted an experiment (Exp. 1) on embedded-question interpretation in Akan with audio stimuli (details cut for space reason). Results from the experiment showed a binomial distribution for the acceptance of non-Strong-Exhaustivity readings of *nim* ‘know’, with longer response times for rejection responses. This suggests that, as in English (cf. Cremers & Chemla 2016), some participants gave logical answers, while others adopted a stronger, pragmatically-enriched reading of ‘know+embedded Q’ (also seen in higher processing costs visible in their RTs, cf. Tavano & Kaiser 2010).

Atchan experiments. We initially conducted a pilot replication of Exp. 1 in Atchan. After a pilot of 5 participants, we stopped data collection due to high failure rates in control items. There were several ways in which pilot participants systematically misinterpreted the task, which we believe was due to unfamiliarity with the task and insufficient training in the experiment. As a proof of concept, we conducted a second pilot experiment, adapting the design of the training section to address these shortcomings (set-up details cut for space reason). This pilot was conducted with 6 Atchan speakers, and was far more successful: 4/6 participants gave expected answers to the items (the two others were heritage speakers).

Discussion. The difference of results between Akan and Atchan speakers can be explained by the populations tested. Akan speakers were linguistics students of the University of Ghana, all literate; Atchan speakers were sometimes illiterate and often had little experience with computers. However, with adequate training our second Atchan pilot was successful. Thus, we conclude that it is possible to collect quantitative semantic judgements in controlled contexts with non-WEIRD populations (Heinrich et al. 2010) by tailoring the experiment to the phenomenon and the fieldwork setting. In the case of phenomena involving pragmatic reasoning, like question exhaustivity, these larger-scale experiments can reveal interspeaker variation that might otherwise not be readily observable in one-on-one elicitation.

References: • Heinrich et al. (2010). Most people are not WEIRD. *Nature* 466. • Matthewson (2022). Semantic fieldwork: How experimental should we be? *Semantic Fieldwork Methods* 4(2). • Tavano & Kaiser (2010). Processing scalar implicature: What can individual differences tell us. *Proceedings of the 33rd Annual Penn Linguistics Colloquium*.