Broad generalizations about pragmatic processing

Research in the behavioral sciences, including the study of linguistic behavior, constantly grapples with a tension between overgeneralizing based on limited data, and “overfitting”—providing too narrow an explanation for what is actually a more general phenomenon. Experimental pragmatics is particularly susceptible to these issues because the intuitions we are after go beyond the grammar: they have to do with how language users integrate their knowledge about the world with their mental representations of the discourse, and that world knowledge is both highly dependent on an individual’s experiences, and highly likely to involve domain-general mental representations rather than language-specific ones. The predominance of work on WEIRD populations both (1) increases the risk of “overfitting”, and (2) makes generalization feasible in the early stages of research on a topic, where the cycle of hypothesis testing and update are still converging on a theory.

I discuss two case studies that exemplify (1) and (2), involving Visual World eye-tracking and offline experiments on domain restriction in alternative-sensitive particles and comparison class selection in gradable adjectives. First, I show how the same set of data can be given explanations at different levels of generality; the narrowness or broadness of the explanation in turn influences the domain-specificity/generality of the predictions to be tested in the next stage of investigation. I use the second study to argue for the utility of populations that are relatively homogeneous in terms of their experiences with the world, particularly when an empirical base is just being established for a particular phenomenon. However, the framework in which the research questions and explanations are stated must be sufficiently broad to allow generalizations that extend beyond language-specific properties of classes of meanings.