Memory and Other Limits on Audience Design in Reference Production

William S. Horton (whorton@northwestern.edu)
Department of Psychology, 2029 Sheridan Road
Evanston, IL 60208-2710 USA

Abstract
Standard accounts of audience design in reference production have assumed the involvement of relatively explicit “models” of communicative partners, which allow speakers to tailor their utterances on the basis of what addressees know. Recent psycholinguistic work, though, suggests that other-modeling may not be the default case, and that audience design may depend instead on a variety of factors related to the nature of the conversational situation and individual speakers’ cognitive capacities. Ordinary processes of memory encoding and retrieval, in particular, may constrain language production and audience design in important ways.

Keywords: reference production; audience design; memory-based processing.

Overview
In everyday language use, speakers must often generate referring expressions that allow listeners to uniquely identify objects in the world. A variety of factors influence reference generation, including the degree to which a referent is familiar, the referent’s relative prominence in the discourse, and the availability of other objects in the environment. However, cooperative speakers generally are expected to take into account the perspectives of addressees when formulating referring expressions, a process known as audience design. In principle, audience design requires that speakers consider what information is in common ground, the set of knowledge they share with their addressees. For example, the Gricean maxims specify how referring expressions should reflect what addressees know. Thus, to avoid violating a maxim like Quantity, speakers must consider the common ground they share with an addressee in order to know not only what to say but how much to say when picking out a particular referent for that individual.

Although audience design is an important communicative goal, considering the needs of addressees potentially poses a steep problem for speakers. Representing common ground is likely to be cognitively demanding, at the very least. However, even if such representations were relatively cost-free, speakers would still have mostly indirect evidence concerning what addressees actually know and believe—and the information that speakers did have would have to be available within the time course necessary to have an impact upon message planning. Researchers interested in describing processes of reference production must account for how language users (mostly) successfully refer despite these underlying challenges.

Within psycholinguistics and related fields, there have been a variety of proposals concerning the role that explicit consideration of the addressee might play in shaping reference production. As illustrated in Figure 1, the range of theoretical positions on this topic runs from models that assume full consideration of the addressee to models that assume little if any consideration of the addressee. In between, though, are a number of intermediate stances that invoke limits on speakers’ capacity to routinely engage in full-blown audience design. These limits can emerge from factors such as the nature of the discourse context, speakers’ own cognitive capacities, and the particular aspects of utterance planning under consideration. This theoretical middle ground represents a significant shift away from more dichotomous, all-or-nothing views of the role of audience design in language use, and more importantly, accomplishes this shift by specifying possible influences upon speakers’ ability to consider their addressees.

In my talk, I will discuss the issues involved in these varied perspectives on audience design, with particular focus on the recent memory-based account of conversational common ground proposed in Horton and Gerrig (2005). My goal will be to highlight some of the common themes shared by these recent proposals, including the way they directly consider the influence of domain-general cognitive mechanisms on high-level aspects of language use. After presenting some recent evidence in support of the memory-based approach, I will also describe some differences in the types of linguistic phenomena addressed by these proposals. Finally, I will point out several open questions that remain, as well as important directions for future research.

Figure 1: A continuum of possibilities describing the extent to which speakers might consider their addressees, including ways that full consideration might be limited.