Grice in the Grammar: How Dynamic Social Networks Give Rise to Honesty and Evidentials

Grice's Maxim of Quality is an apt description of linguistic behavior: we generally try to make our conversational contributions ones that are true, not saying what we lack evidence for or know to be false. The evolutionary stability of language hinges on our observance of this maxim: if speakers convey no reliable information, listeners do best to ignore them, and speakers do best not to speak in the first place. But, just as we have every reason to be honest when it serves our interests, we have every reason to do otherwise when it does not. This leads to two questions. First, what social mechanisms enforce honest and stability via the Maxim of Quality? Second, what consequences do these mechanisms have for linguistic structure?

In answer to the first question, we consider how individuals choose who they speak and listen to. We present simulations of agents in a dynamic social network and show how they vote with their mouths and ears, interacting only with other agents who themselves provide reliable information. In this case, honesty actually is the best policy, guaranteeing inclusion in the social network and access to valuable information. The simple mechanism of choice, inclusion or exclusion, enforces honesty in the form of the Maxim of Quality. In answer to the second question, we consider a population where the Maxim of Quality is the norm. By the division of pragmatic labor, speaking without sufficient evidence requires caveat. If, to adopt a slogan, yesterday's pragmatics is today's syntax, then we would expect a gap in the typology of evidential marking. No languages that mark source of evidence grammatically mark direct but not indirect evidence. This predicted gap is indeed borne out, suggesting that social mechanisms can play a role in language at various levels, from pragmatics to syntax.