

Grice (1957; 1969) argued that to mean something by an action is to do it with a communicative intention—an intention to change an addressee’s state of mind, in part by getting them to understand that this is what you intend. This idea arose in the context of Grice’s attempt to analyze the concept of meaning, but it has also formed the basis of an influential theory of communication. I will argue that this theory of communication is ultimately correct. But we should not be satisfied with how Grice arrived at it, for two reasons.

The first is that we should not trust Grice’s methodology of testing conceptual analyses against intuitive judgments about imagined scenarios. Despite many attempts this project has not converged on a correct analysis. Even if it had, the result would be little more than a recapitulation of our folk theory of communication, when what we should want is an empirically supported theory that posits communicative intentions to do indispensable explanatory work.

The second problem is that although Grice was right about *how* humans communicate, he didn’t explain *why* we do it this way. Why would revealing our intentions to our addressees be a good way to convey information or coordinate our activities with others? Since intention recognition seems to be a resource-intensive way of communicating, and since several less cognitively demanding alternatives have been put forward, it is reasonable to ask why we would bother with communicative intentions. What communicative benefits do they confer?

My way of addressing these objections is to argue that communicative intentions play an indispensable role in our capacity to design communicative acts for our addressees. This is our capacity for “communication design,” which can be helpfully divided into “message design” (the process of choosing what to communicate and to whom) and “signal design” (the process of deciding how to convey a given message to a given addressee).

Why should we posit communicative intentions to explain communication design? The argument goes like this: Communication design is an application of general-purpose practical reasoning. This sort of practical reasoning is hierarchical, and revolves around intentions: at each stage, it proceeds from one or more prior intentions to a new subplan, which fills in the details of how to accomplish them (Bratman, 1987). By using this kind of reasoning to construct complex, hierarchical plans, we are able to connect our abstract goals to the specific bodily

movements by which we pursue them. But if communication design works in this way, then there will some first step in the process at which we form an intention that pairs an intended message with an intended addressee. This pairing is the culmination of the message-design process, and is needed as an input to the signal-design process. The resulting intention is just the first part of a communicative intention.

On this view, communicative intentions are elements in complex plans that we construct in order to realize our goals by performing communicative acts. But they are particularly important elements because—as Grice argued—they are what set the terms of communicative success. Message design is the practical reasoning that lies upstream from the formation of a communicative intention and signal design is the practical reasoning that lies downstream. Even within communicative intentions themselves we find the telltale signs of hierarchical practical reasoning: A communicator tries to reveal their intention to have some effect on their addressee as a strategy for having that very effect. It is a particularly good strategy when the addressee is cooperative enough that knowing what the communicator intends them to think gives them a reason to think it. And when these conditions are met, intention recognition becomes very powerful because it recruits the addressee’s cognitive capacities into the shared task of changing their mind.

Our capacity for communication design is unique to humans, and we use it constantly. Indeed, we need it in order to competently use basic features of natural language. Consider a mundane linguistic task like selecting a noun phrase. Suppose I want to say something about Wittgenstein. Should I say ‘he,’ ‘Ludwig,’ ‘Wittgenstein,’ ‘the author of the *Tractatus*,’ ‘the philosopher we were talking about last week,’ ‘an important Austrian philosopher,’ or one of countless other options? How I choose should depend in systematic ways on my beliefs about what my addressee knows about Wittgenstein, whether they know his name, whether they are on a first-name basis with him, whether they are currently thinking about him, what they think I know about him, whether they have tracked earlier bits of our conversation, and so on. This is just one routine example of how ordinary language use depends on our ability to intelligently reason about our addressees and their states of mind.

Do we really do all of this reasoning? The empirical literature suggests that we do, although there are some systematic patterns of failure. We are worse at factoring in differences in perspective when we are young (Keysar, 2008), happy (Converse

et al., 2008), or short on verbal working memory (2007). But recent evidence also suggests that although considering interlocutors' perspectives is costly, we do it from the earliest stages of planning or interpreting speech (Heller et al., 2008; Nadig and Sedivy, 2002), and we reason not only about how our addressees are likely to interpret us, but also about when this reasoning is likely to be worth the trouble (Hawkins et al., 2021). All of this gives us reason to think that communication design is resource intensive, but often worth it.

What makes communication design worth the trouble? In short, it makes us much better communicators than we could otherwise be. It allows us to communicate in the service of a wide variety of abstract goals, including both strategic and cooperative goals. It allows us to squeeze more information into smaller packages by distinguishing what our addressees already know from what we need to give them. A capacity for communication design is also presupposed by some of the most empowering design features of natural language, including ubiquitous context sensitivity and polysemy, devices that allow us to manage presupposed content, a noun-phrase system that gives us countless ways to exploit our addressees' perspectives on our intended referents, and the fact that each of us is a lexical specialist with access to only a small sample of our collective lexical resources. Together, these features add up to a communicative superpower—one that we would not possess without our capacity for communication design. And that capacity, I say, depends on our ability to use communicative intentions at a crucial step in the process of reasoning about how to communicate.

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