

# What we ought to know: Making and breaking common ground

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Turn construction in dialogue is a fundamentally incremental and interactive process (Goodwin, 1979), and the coordination of common ground is crucial to understanding. However, although the establishment of common ground is known to be influenced by a number of factors in dialogue, such as the context in which information was mentioned and partner commitment and engagement (Brown-Schmidt, 2012), many accounts assume that interaction plays only a peripheral role (Keysar, 2007). Additionally, contributions to dialogue are often fragmentary or incomplete (Fernández and Ginzburg, 2002) and these incomplete contributions may also be grounded (Eshghi et al., 2015), clarified or subsequently completed (Gregoromichelaki et al., 2011). Despite these observations, there has been little work that experimentally tests the influence of common ground on the interactive building up of meanings in dialogue at the sub-sentential level, or to what extent we take account of shared context when we are constructing a turn.

Using the DiET chat tool (Healey et al., 2003), we report a series of experiments that alter turns in an ongoing dialogue to see how this collaborative process of building common ground with an interlocutor affects people’s interpretations of and responses to clarification questions and incomplete utterances. In two experiments we systematically intervene in a real time text chat, by targeting a noun phrase that has already been talked about in the current dialogue (i.e. it is *given* information) or one that has not been mentioned previously (i.e. it is *new*). In the first experiment, we introduce spoof clarification requests, querying a given or a new noun phrase, and appearing to come from either the other person in the conversation or an external source. The second experiment truncates genuine turns in between a determiner and noun in a given or new noun phrase (following Howes et al., 2012).

Results show that whether something has been previously parsed or produced affects responses. However, there are additional effects that can only be accounted for by taking into account the joint action of building common ground. A formal model of dialogue needs to take into account not just what is said and how, but also who is actively involved in the process of doing so.

## References

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