Expectations about discourse relevance can license direct objections to presupposed content

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Speakers have available to them a number of different strategies for indicating the status of information in their utterances. By selecting a particular way of packaging their utterance content, they can signal to the listener what information is meant to be backgrounded (part of the shared Common Ground) and what information is being foregrounded (at-issue material). Constructions that package content as presuppositions are typically taken to background that content, making it generally less addressable than asserted content. For example, in (1), Jo's first utterance in the exchange contains the presupposition trigger stop; the utterance presupposes the fact Jo used to play tennis and it asserts that Jo has now stopped. The status of presupposed material as backgrounded can be seen in the contrast between (1a–1b), whereby Rory's question about the truth of what Jo said succeeds in addressing the asserted content, not the presupposed content.

- (1) Jo: 'I stopped playing tennis.' Rory: 'Really?'
 - a. Jo: 'Yes, I stopped.'

b. Jo: #'Yes, I used to play tennis.'

Another measure of backgrounded/foregrounded status comes from the 'Hey, wait a minute' test (Fintel, 2004), which posits that extra linguistic effort is required to object to presupposed content, as shown in (2a). In contrast, asserted content can be addressed with a direct objection and 'Hey wait a minute' seems infelicitous in (2b) when objecting to asserted content.

- (2) Jo: 'I stopped playing tennis.'
 - a. Rory: 'Hey, wait a minute, I did not know that you used to play tennis.'
 - b. Rory: #'Hey, wait a minute, I did not know that you stopped playing tennis.'

These examples suggest a clear distinction between the foregrounded status of asserted content and the backgrounded status of presuppositions. They also suggest that the speakers' choices in information packaging can influence an interlocutor's expectations about what bits of content are meant to be discussed further – assertions are addressable and presuppositions are not. However, recent work has posited that not all presupposed content is backgrounded, particularly material that is made to be at-issue, i.e. relevant to the discourse question (e.g. Simons et al. (2010)). Relatedly, what the 'Hey wait a minute' test diagnoses may actually be any upcoming discontinuation of the ongoing discourse (Cummins et al., 2013), not only an objection to presupposed content.

The current dialogue-based experiment investigates the relationship between discourse relevance and the foregrounded/backgrounded status of presupposed material. Specifically, we set up a discourse context involving the (role-played) interrogation of a criminal suspect by a detective in order to control the relevance of certain content, and we manipulated how the suspect (a confederate) delivered certain false information —either as an assertion or a presupposition. We measure whether detectives (participants) are more likely to object to false content when it is asserted rather than presupposed, as would be predicted under a model in which presupposition is sufficient to background target content. In addition, we examine the objections that participants produce to see if they showed greater linguistic effort when objecting to presupposed content compared to asserted content. We measure linguistic effort via participants' word count (as an operationalisation of the 'Hey wait a minute' test) and hesitations like fillers, repairs, and repetitions (under the

assumption that hesitations reflect cognitive effort or production difficulty; see Loy et al. (2018) for related work on deception and hesitation).

In the task, 50 participants of which 46% were female (native English speaking, aged 18-39) took the role of the detective and reviewed the fictional case notes for a criminal investigation of an art heist. They then were provided with a list of interrogation questions to pose to the suspect and were told that their job was to uncover the truth about what had happened and catch any lies from the suspect. The case notes contained facts (see (3)) which the suspect subsequently refuted with responses that either asserted or presupposed a false fact, as in (4a-4b). The questions were designed to be broad enough that both response types provided relevant, though not direct, answers. The asserted/presupposed lies represented information that was salient to the interrogation. There were 8 target questions, embedded among 11 fillers. Presupposition triggers included: stop, know, regret, discover, return, only, to be annoyed, to be happy.

- (3) Evidence (personal file): Suspect worked for the national gallery in China.
- (4) Participant: 'Have you held any other positions?'
 - a. Suspect: 'I stopped working for the national gallery in Russia in 2017.'
 - b. Suspect: 'I used to work for the national gallery in Russia until 2017.'

We analysed the participants' reactions to the suspect's lies using a mixed-effects logistic regression to model the binary outcome of participant objection, with a fixed effect of condition (asserted content = 0, presupposed content = 1) and random effects for participant and trigger. In keeping with prior work that links presupposition to informational backgrounding, participants produced more objections to false assertions (89% of the time) than false presuppositions (79% of the time; β =-0.744, SE=0.297, p=0.013). The suspect therefore appears to have better concealed the lies when using a presupposition, possibly achieving this by changing participants' expectations about what content would be taken up as the discourse progressed, which thereby rendered the false content less evident. However, there were no significant differences in word count or number of hesitations between conditions, suggesting that no extra linguistic effort was required to object to presupposed content. Even when the lie was formulated as a presupposition, participants do not appear to have needed to signal a discontinuation in the discourse when they objected to the lie, presumably because of its discourse relevance.

The experimental results suggest that, when material is relevant to the discourse question, it can be challenged directly by a subsequent speaker whether it is formally asserted or presupposed. However, expressing relevant material through presupposition rather than assertion appears to have the effect of reducing the frequency of such challenges. Thus, listeners use both—their expectations about information packaging as well as about the overall discourse topic—to determine which content bits may be discussed further warranting discourse coherence.

References

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