

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; $\beta=-0.744$, $SE=0.297$, $p=0.013$). 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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