

Syntactic adaptation may depend on perceived linguistic knowledge: Experimental evidence from interaction with native and nonnative speakers

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When interacting, speakers tend to reuse the syntactic structures previously used by their partner. This type of adaptation has been attributed to automatic, unconscious *priming* processes, in which recently encountered forms are likely to be repeated due to being more highly activated (Pickering & Branigan, 1998). Alternatively, it may be driven by listener-oriented mechanisms such as *audience design*, where utterances are tailored to the specific needs or characteristics of an interlocutor (Clark, 1996); or *accommodation*, where utterances are designed to manage social distance between speakers (Giles, 1973). The latter explanations may be particularly relevant during conversations between native and nonnative speakers, where mutual intelligibility may be affected by differing levels of linguistic knowledge, increasing the pressure on native speakers to adapt their speech to facilitate communication (Braidì, 2002; Ferguson, 1975). Here, we present two experiments exploring the role of listener-oriented mechanisms in syntactic adaptation, comparing native-native and native-nonnative interaction in English.

We used a confederate scripting paradigm (Branigan, Pickering, & Cleland, 2000) with ditransitive sentences to investigate the extent to which speakers adapt to the forms used by their conversation partner. Naive participants were paired with a confederate who was either a native or nonnative speaker of English, and took turns to describe and match pictures.

In Experiment 1, participants ($n = 40$) heard a confederate produce prime descriptions using both prepositional-object (PO; e.g. “The chef gives the apple to the golfer”) and double-object (DO; e.g. “The chef gives the golfer the apple”) sentences. When it was their turn to describe a target picture, participants tended to produce the same construction used by the confederate previously, $\beta = 2.87$, $SE = 0.46$, $p < .001$. This effect was magnified when the verb was the same across prime and target descriptions, $\beta = -3.03$, $SE = 0.66$, $p < .001$. These results replicate those of Branigan et al. (2000). We observed similar levels of adaptation in the native and nonnative confederate conditions, suggesting that participants did not adapt more towards a nonnative conversation partner. However, participants in the experiment had clear evidence that their interlocutor was familiar with both the PO and DO constructions, reducing the need to consider using one form over the other to facilitate communication.

In Experiment 2, we explored the effect of interacting with a less flexible interlocutor, and tested whether adaptation would extend to the production of ungrammatical constructions. Participants ($n = 40$) heard a confederate produce prime descriptions exclusively in the DO construction, half of which were ungrammatical (involving a non-alternating verb; e.g. “The chef *donates* the golfer the apple”). We observed greater levels of adaptation during interaction with a nonnative interlocutor, $\beta = 1.05$, $SE = 0.52$, $p = .04$. Moreover, this effect did not interact with verb type, suggesting that the increased tendency to adapt to nonnative interlocutors extended to the production of ungrammatical DO constructions.

To evaluate how the difference in confederates’ linguistic behaviour across the two exper-

iments affected participants’ adaptation, we analysed the combined data from Experiments 1 and 2, focussing on the subset of items that appeared in both experiments. Here, we found a confederate by experiment interaction, $\beta = 1.48$, $SE = 0.68$, $p = .03$, indicating greater levels of adaptation to a nonnative than a native confederate in Experiment 2 (see Fig. 1).

Our results demonstrate that native English speakers can be influenced by a nonnative partner in their choice of syntactic structure. Moreover, they show greater levels of adaptation to a nonnative interlocutor only when there is clear evidence of a partner’s limited linguistic knowledge. This suggests that the extent to which speakers adapt to their conversation partner may depend on their perception of their partner’s linguistic capabilities. Notably, this adaptation extends to the production of ungrammatical DO constructions, suggesting that speakers may have modified their perspectives about grammatical well-formedness during interaction with a nonnative partner (cf. Hanulíková, Van Alphen, Van Goch, & Weber, 2012). These results highlight the role of listener-oriented mechanisms in syntactic adaptation during dialogue.

Our inter-experiment comparison suggests that the difference across the two experiments was not due to increased adaptation to nonnative interlocutors in Experiment 2, but to decreased adaptation to native interlocutors. This may point towards an accommodation-based explanation for adaptation where native speakers exhibited divergence from a native interlocutor, perhaps in order to distance themselves from the (ungrammatical) linguistic choices made by their partner.

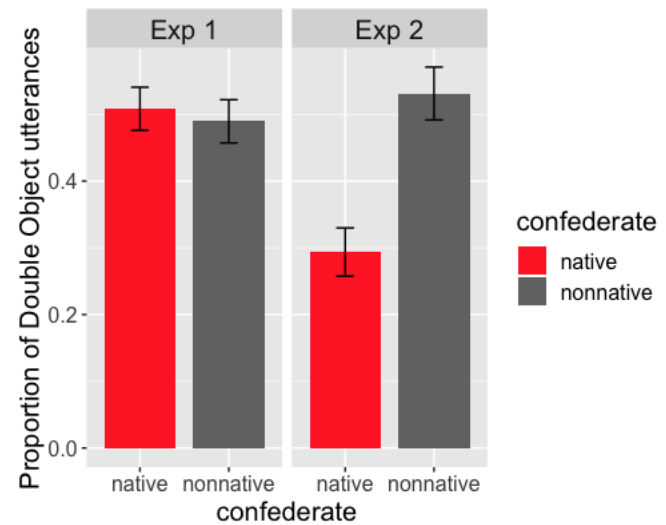


Figure 1: Proportion of DO descriptions produced by participants following a DO prime in Experiments 1 and 2

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