Incongruent prosody and context in the comprehension of contrastive focus: A two-alternative forced choice task experiment

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Contrastive focus is a category of information status [1] which indicates that an expression is a subset from a set of alternatives. [2,3] In English, this meaning is signalled with prosodic prominence and an L+H* pitch contour on the focused expression. [4] When listeners hear this focus prosody on an adjective, they make anticipatory eye gazes toward an object (noun) that is given within the discourse context. [5] Additionally, when presented with a contextual *wh*-question, listeners can identify the answer, i.e., the utterance that emphasizes the contrastive information. [6] Taken together, it is found that listeners use both contextual and prosodic cues to infer information status meanings, but it is unclear whether listeners rely on both cues equally.

Three pilot experiments investigate the comprehension of contrastive focus when contextual and prosodic cues conflict by investigating the following **research questions**: Do native English speakers judge a mismatch when focus prosody emphasizes noncontrastive information based on the context (Pilot Exp. 1)? Do their mismatching judgements change if they are given feedback (Pilot Exp. 2) or if they are familiarized with focus prosody (Pilot Exp. 3)?

In all experiments, native English speakers completed a two-alternative forced choice task and identified whether an utterance matched a context comprised of a short story and corresponding picture. The utterance either emphasized contrastive information based on the context (*congruent trials*) or emphasized non-contrastive information (*incongruent trials*). The filler items consisted of compound and non-compound minimal pairs (e.g., *strawberry* vs *straw berry*), which, like the target items, are differentiated based on prosody alone.

Pilot Exp. 1: Participants (N=5) did not judge a mismatch in the *incongruent test trials* (11% correct), although they reported hearing unexpected emphasis during debriefing. This suggests that they perceived the incongruent prosodic cues, but it is unclear whether their low accuracy reflects their comprehension of contrastive focus or their understanding of the task.

Pilot Exp. 2: To ensure that participants (N=11) understood the task, they received feedback in the practice trials. With this manipulation, they did judge a mismatch in the *incongruent test trials* (70% correct). This further suggests that incongruent prosodic cues are perceivable in the comprehension of contrastive focus. However, the feedback may have biased responses in a way that does not reflect real life language processing.

Pilot Exp. 3: To facilitate the matching experiment without providing explicit feedback, we introduced another task to familiarize participants (N=11) with prosodic and contextual cues. In this task, participants selected which of two focus prosodies matched the preceding context, and then immediately after, they completed the matching experiment with different items. Contrary to past research, [6] participants were not very accurate at selecting the prosody that emphasized contrastive information (64% correct). Like in Pilot Exp. 1, they only sometimes judged a mismatch in the *incongruent test trials* (43% correct).

Taken together, these results suggest that incongruent prosodic cues are perceivable, but only affect the information status meanings when listeners are aware of these cues. Otherwise,

incongruent prosodic cues do not seem to affect the information status meanings that listeners infer from the context. To confirm these results, the experiments will be tested will larger samples and statistical analyses will be done to assess the significance.

Selected References

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