Non-native-like encoding of contrastive accents in L2 spoken discourse comprehension: Evidence from self-paced listening

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Successful discourse comprehension requires understanding representing the relations among entities in the discourse. A long-standing question in the L2 literature is whether L2 processing is intrinsically different from L1 processing and whether L2 speakers can acquire the same processing strategies as those of native speakers. For native English speakers, contrastive pitch accents enhance a representation of a specific contrast item by facilitating rejections of salient alternatives [1-2]. However, L2 comprehenders do not use them to facilitate memory in a native-like way [3]. Recent work [4] found that a cue to contrast in written discourse (namely, font emphasis) did help L2 learners' memory for the discourse in the same way as it helped native speakers, suggesting that non-nativelike encoding of contrastive accents is not due to fundamental L1-L2 differences in processing prominence cues in general. Given that even native speakers may show non-native-like behavior in temporally demanding situations [5-6], it might instead reflect L2 learners' online processing demands of processing a prosodic cue in addition to words and syntax in running speech. This study explores whether L2 learners may show native-like encoding of contrastive accents when the task allows them to take as long as they fully encode salient alternatives while listening.

Native English speakers (n=62) and native Korean speakers who learned English as an L2 (n=65) participated in a self-paced listening task. The L2 participants' English proficiency was assessed using a multiple-choice version of the cloze test. In the study phase, subjects listened to stories from Fraundorf et al. (2010) in a segment-by-segment fashion at their own pace. Each story established a pair of contrasting items, and one item from the pair was referred to in the subsequent continuation passage (1). We manipulated critical words in the continuation passage to carry either a contrastive or presentational accent. After they listened to all of the stories, subjects' memory was tested by having them judge statements about the stories as true or false. Across items, these probes could be either a correct statement about the critical item (2), an incorrect statement about the contrastive alternative (3), or an incorrect statement about an unmentioned item from the same semantic category (4).

To test whether reduced time pressure helped L2 learners to process and represent contrastive accents in a native-like manner, we directly compared memory performance to earlier studies using an experimenter-paced listening task [1][3]. For native speakers, we replicated the mnemonic benefit of contrastive accents: Contrastive accents benefited memory by facilitating rejections of statements about the contrastive alternative. For higher-proficiency L2 speakers, however, contrastive accents helped rejections of statements only about the unmentioned item, just as in the experimenter-paced listening task. For lower-proficiency L2 speakers, reduced time pressure helped them to better remember the discourse, but contrastive accents did not lead to any mnemonic effect.

The results show that contrastive accents failed to lead L2 speakers to process and represent a discourse in a native-like way even in situations in which online processing demands were reduced. Given L2 speakers' native-like use of font emphasis to encode and represent a discourse in memory [4], the current data suggest that non-native-like encoding of contrastive accents may not be due to intrinsic L1-L2 differences in encoding salient alternatives in response to prominence cues in general, but due to some inherent difficulty of learning the exact function of the contrastive accent itself (see also [7-8]).

- (1) Both the British and the French biologists had been searching for the endangered monkeys. Finally, the BRITISH found one of the monkeys in Malaysia and planted a radio tag on it.
- (2) The British scientists found the endangered monkey.
- (3) The French scientists found the endangered monkey.
- (4) The German scientists found the endangered monkey.

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¹ For example, a contrastive accent on British in (1) helps comprehenders correctly reject a statement about the contrast item (3) but not a statement about an unmentioned item (4).