## What's in Duration? Perception of Narrow & Corrective Focus in Urdu/Hindi

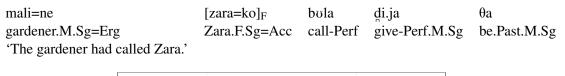
In Hindi/Urdu, the preverbal position is the structural focus position (Butt and King 1997, Gambhir 1981) but the prosodic realization of focus is still controversial. The use of F0 and duration for focus marking and the relevance of these cues to interpret different focus types in Urdu is still unknown.

To date, very few studies have tested the prosody of corrective focus in Urdu/Hindi. Genzel and Kügler (2010) investigated the prosody of corrective focus in Urdu/Hindi. They found that correctively focused adjectives, compared to broad focus, had longer duration and a wider F0 span. However, Féry et al. (2016) denied the presence of prosodic differences between different kinds of focus in Urdu/Hindi. The conflicting evidence from these production experiments led us to set up this perception experiment to investigate if speakers of Urdu/Hindi are sensitive to prosodic cues associated with corrective focus. We here focus on duration and report that Urdu/Hindi speakers' evaluation of syllable durations depends on pragmatic context.

We constructed 12 SOV sentences, with the target words at the preverbal focus position (1). These sentences were recorded by a female native speaker of Urdu in narrow and contrastive focus contexts. To isolate the role of duration, we created PSOLA-manipulated versions of sentences with reversed syllable durations of the object, using PRAAT (v. 6.0.28). The recordings with original and modified durations were presented in narrow and corrective focus. The participants saw the context, listened to the utterance, and rated its naturalness relative to the context on a scale of 1 to 5. 29 respondents' ratings and response times were recorded. We fitted an Imer model for statistic analysis (Baayen et al. 2008).

The results showed a significant interaction between *duration condition* and *presented context* (p = .004). In narrow focus contexts, both long and short syllable durations were acceptable, but in corrective focus contexts, short durations were rated significantly worse than long durations (Fig.1). Our data lend support to the results by Genzel and Kügler (2010) who reported longer syllable durations in corrective than broad focus in Urdu/Hindi. The observed asymmetry in the interpretation of duration could be a consequence of the structural focus position. Here no durational marking is necessary and is not interpreted. Corrective focus needs to be marked by duration. An alternative interpretation is that listeners are more sensitive to the correct prosodic realization of more marked forms (corrective focus) but accept overly marked prosodic forms in less marked pragmatic conditions (narrow focus). (cf. Braun 2004)

- (1) a. **Narrow focus:** The gardener was working in the garden when someone asked him to fetch a resident of the house. Your mother asked whom the gardener had fetched. You reply:
  - b. **Corrective focus:** The gardener was working in the garden when someone asked him to fetch a resident of the house. Your mother thinks that the gardener had fetched Ali. You correct her and say that, in fact:



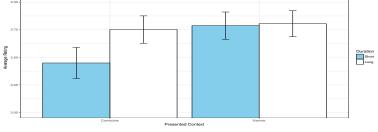


Fig. 1: Average ratings for duration manipulation in narrow and corrective contexts. The bars indicate CI(95%).

## **References**

Baayen, Harold, Davidson, Doug J. and Bates, Douglas M. 2008. Mixed-effects modeling with crossed random effects for subjects and items. Journal of Memory and Language 59(4), 390-412.

Braun, Bettina. 2004. Answers to the perception of thematic contrast and questions regarding the perception of thematic "non-contrast". In Pro*ceedings of the 2nd International Conferences on Speech Prosody*, pages 685–688, Nara, Japan. Butt, Miriam and King, Tracy Holloway. 1997. Null Elements in Discourse Structure, written to be part of a volume that never materialized,

http://ling.uni-konstanz.de/pages/home/butt/main/papers/nulls97.pdf.

Féry, Caroline, Pandey, Pramod and Kentner, Gerrit. 2016. The prosody of focus and givenness in Hindi and Indian English. Studies in Language 40(2), 302–339.

Gambhir, Vijay. 1981. Syntactic restrictions and discourse functions of word order in Standard Hindi. Ph. D.thesis, University of Pennsylvania, Philadelphia.

Genzel, Susanne and Kügler, Frank. 2010. The prosodic expression of contrast in Hindi. In Proceedings of Speech Prosody, Chicago.