Is prosody an intentional signal of information structure?

Jennifer E. Arnold University of North Carolina at Chapel Hill

jarnold@unc.edu

Speakers frequently use prosody to mark information status. For example, in the phrase "The panda blinks", the pronunciation of "panda" is likely to be shorter when it is given (previously mentioned) than when it is new. The standard explanation is that prosody encodes the information structure, as a part of the intended meaning. Given information is topical, while new or contrastive information is focused, and needs to be marked with an accent. Yet this effect may also be influenced by the fluency of speech production processes. Given information is primed, which can speed production and promote reduced pronunciations, which sound less accented (Bard et al., 2000). I examine the relative contribution of both processes in two studies.

In Study 1, participants described images of animals performing pairs of actions (spin, expand, blink,

shrink). The target instruction *The panda blinks* was preceded by a sentence making it given (*The panda spins*), or new (*The frog spins*), lexically given but not informationally in focus (*The panda and the frog spin*), or conceptually but not lexically given (*All the animals spin*). The information-status account predicts reduction only in the given condition, whereas the fluency account predicts reduction in both the given and lexically-given conditions. When there was no addressee, results supported the fluency account, but with a live addressee speakers reduced more when the target was in focus.

Study 2 examined the effect of predictability, where the nonsubjject *Liz* is relatively predictable following an implicit causality verb (*Ana admired Liz because...*) or a transfer verb (*Ana gave the book to Liz...*; Stevenson et al., 1994). We found durational reduction only in cases where production was slow, suggesting that fluency is a stronger determinant of reduction than semantic predictability. Together these studies show that both fluency and information status influence prosody. **References:** • Bard, E. G., et al. (2000). Controlling the intelligibility ... *JML*, *42*, 1-22. • Stevenson, R. J., et al.. (1994). Thematic roles... *LCP*, *9*, 519–548.