

Is breathing prosody?

Jens Edlund¹, Mattias Heldner², Marcin Włodarczak², ¹Royal Institute of Technology (KTH), Stockholm, ²Stockholm University

Even though we may not be aware of it, much breathing in face-to-face conversation is both clearly audible and visible. Consequently, it has been suggested that respiratory activity is used in the joint coordination of conversational flow. For instance, it has been claimed that inhalation is an interactionally salient cue to speech initiation, that exhalation is a turn yielding device, and that breath holding is a marker of turn incompleteness (e.g. Local & Kelly, 1986; Schegloff, 1996).

So far, however, few studies have addressed the interactional aspects of breathing (one notable exception is McFarland, 2001). In this poster, we will describe our ongoing efforts to fill this gap. We will present the design of a novel corpus of respiratory activity in spontaneous multiparty face-to-face conversations in Swedish. The corpus will contain physiological measurements relevant to breathing, high-quality audio, and video. Minimally, the corpus will be annotated with interactional events derived from voice activity detection and (semi-) automatically detected inhalation and exhalation events in the respiratory data. We will also present initial analyses of the material collected.

The question is whether breathing is prosody and relevant to this symposium? What we do know is that the turn-taking phenomena that are of particular interest to us are closely (almost by definition) related to several prosodic phenomena, and in particular to those associated with prosodic phrasing, grouping and boundaries. Thus, we will learn more about respiratory activity in phrasing (and the like) through analyses of breathing in conversation.

References

- Local, J. K., & Kelly, J. (1986). Projection and 'silences': Notes on phonetic and conversational structure. *Human Studies*, 9, 185-204.
- McFarland, D. H. (2001). Respiratory markers of conversational interaction. *Journal of Speech, Language, and Hearing Research*, 44, 128-143.
- Schegloff, E. A. (1996). Turn organization: One intersection of grammar and interaction. In E. Ochs, E. A. Schegloff & S. A. Thompson (Eds.), *Interaction and Grammar*, 52-133, Cambridge: Cambridge University Press.