Prosody and utterance boundaries in ASL interpretation

Research in a number of spoken languages has shown that speakers use a variety of means to indicate the organization of a message into phrasal units, and that listeners are sensitive to this organization (e.g., Wightman et al. 1992, van Donzel 1999). The organization of the message may be especially critical when language is being transmitted through an interpreter since the message is conveyed via a third party, rather than directly from speaker to listener. In this study, we investigated the communication of phrasing in English-to-ASL interpretation by asking Deaf ASL users to indicate perceived boundaries as they viewed a video of an interpreted lecture. The locations of these perceived boundaries were then examined to see what prosodic cues might be responsible for the perception of a boundary. The study is unusual in focusing on the use of phrasing in interpretation, and in also contributing to the extremely limited literature on the use of prosody in signed languages (e.g., Wilbur 1994, Boyes-Braem 1999, Sandler 1999, Winston and Monikowski 2003).

The source material for this study was a videotape of a 15-minute lecture, presented in English by a university lecturer. Five certified, experienced signed language interpreters were then videotaped as they interpreted the lecture. Each interpreter was recorded on video separately with the same Deaf person serving as audience during all five interpretations. The five interpretations were transferred to a Macintosh PowerBook and loaded into iMovie software. The material was then presented to Deaf ASL users, who were asked to press a key each time they perceived a "sentence" boundary. Before viewing the interpreted lecture, the Deaf judges were shown a video in ASL giving instructions explaining their task, and had a three-minute practice session. The instructions explicitly stated that the "sentences" to be identified did not have to correspond to a complete sentence as in written English. The term "sentence" was used because it was the most appropriate term that was likely to be familiar.

Ten different judges viewed each of the five interpretations. The number of boundaries indicated averaged 66 to 85 per interpreter. Clusters of agreement were identified, where a majority of the judges who viewed a given interpretation had indicated a boundary within an interval of one second. Examination of the recorded interpretations during the times where boundaries were perceived suggest that the interpreters used a variety of prosodic markers to indicate boundaries. These included the use of multiple articulators: hands clasping in front of the body, prolonged duration of final handshape, eye blinks, head nods, and shift of the body back to neutral signing space. Of these, hand clasps appear to be the most reliable boundary marker. In addition, a number of facial gestures were associated with perceived boundaries, including pursed lips, furrowed brows, and eye gaze shifts.

The analysis so far demonstrates that Deaf participants are able to identify sentence boundaries in ASL interpretation, although with varying levels of agreement. The Deaf participants' ability to perform this metalinguistic task may be facilitated by the interpreters' use of multiple articulators to indicate prosodic boundaries, which provides further evidence of 'layering' (Wilbur 2000) in ASL. Even more than in spoken language prosody, the signed language modality gives the language user many choices in the production of prosody.

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