

Children's comprehension of evidentiality through intonation

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In many languages, intonational meaning goes well beyond marking distinctions in sentence type. For languages like Catalan, English, French and Spanish, information about a speaker's degree of certainty about propositional content can be marked intonationally (Gravano, et al. 2008 and Roseano et al. 2016 for declaratives and interrogatives; Armstrong 2015, Armstrong & Prieto 2015; Hara et al. 2014; Michelas et al. 2015; Vanrell et al. 2013 for interrogatives). Prosody has also been shown to serve as an evidential strategy in the marking of indirect evidence in reported speech or discourse fragments reported directly in different languages (Cabedo 2007; Estellés-Arguedas 2015; Günthner 1999; Klewitz & Couper-Kuhlen 1999; Mora & Álvarez 2003). Recently, work on Romance languages has shown that direct vs. indirect evidential distinctions may be encoded through the use of specific intonation contours (Escandell 2017, Vanrell et al. 2017). Vanrell et al. show that *que* + L+H* L% polar questions in Majorcan Catalan convey that the speaker has directly perceived *p*. While many studies explore children's acquisition of evidentiality marked lexically or morphologically, we are not aware of any studies exploring acquisition of intonationally marked evidentiality.

With respect to epistemic prosody, Armstrong & Hübscher (2018) point out that the ability to detect meanings related to speaker beliefs (i.e. disbelief or uncertainty) is quickly developing around the ages of 3 and 6 (see Moore et al. 1993, Armstrong 2014, Armstrong et al. 2014, 2018, Hübscher et al. 2017) with some differences depending on the specific meanings. However, Armstrong et al. (2018) find that sophisticated belief reasoning (as measured through a false belief task) was predictive of children's ability to detect disbelief through intonation (as well as gesture), suggesting that such reasoning facilitates intonational development within the realm of speaker beliefs. A similar general timeframe has been shown for evidential development. For instance, 4- and 5-year-olds are more successful in source reasoning than 3-year-olds. Interestingly, research on the acquisition of grammatically-encoded evidentiality concludes that although children begin using evidential morphemes from age 2, adult-like comprehension does not occur until age 4, or even age 6 (Aksu-Koç 1988, Papafragou et al. 2006, Ozturk & Papafragou 2007, among others).

In light of the studies mentioned above, we aimed to explore children's developmental paths for the comprehension of evidential marking of directly perceived evidence through intonation. We hypothesized that this ability would coincide chronologically with comprehension of non-intonational evidential morphemes. We also explore the relationship between children's general source-marking ability as well as the ability to make inferences based on directly perceived information, hypothesizing that such abilities are a prerequisite for the comprehension of intonationally marked evidentiality. To this end, four different tasks were designed: two non-linguistic tasks and two linguistic tasks. In the two non-linguistic tasks we examined the ability to infer information based on visual and audio evidence, as well as the ability to monitor the source of information (Papafragou et al. 2006). In the linguistic tasks we explored the comprehension of declarative vs. polar question intonation and the detection of evidentiality for *que* + L+H* questions in Majorcan Catalan (Vanrell et al. 2017). Thirty-three children (ages 3-7) participated in the two experimental sessions. Preliminary results suggest that performance on the comprehension tasks are better predicted by source-reasoning skills as measured by the non-linguistic tasks than by age.

Selected references

Armstrong, M.E. & Hübscher, I. (2018). Children's development of internal State prosody. In P. Prieto & N. Esteve-Gibert (Eds.), *Prosodic Development in First Language Acquisition*. Amsterdam: John Benjamins, pp. 271-293.

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