

## The developmental trajectory of perceiving evidentiality through intonation in Majorcan Catalan

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In many languages, intonational meaning goes well beyond marking distinctions in sentence type. For instance, languages like Catalan or English often use intonation to mark a speaker's degree of certainty (Gravano et al. 2008, Armstrong & Prieto 2015, i.a.). Prosody can also be used as an evidential strategy for marking indirect evidence in reported speech or discourse fragments reported directly. For instance, Vanrell et al. (2017) showed that *que* + L+H\* L% questions in Majorcan Catalan convey that the speaker has directly perceived a situation which they have interpreted to point towards *p* through one of the five senses. While many studies explore children's acquisition of evidentiality marked lexically or morphologically, we are not aware of any studies exploring the acquisition of evidentiality marked through intonation.

Children are developing the ability to detect epistemic meanings related to speaker beliefs (i.e. disbelief or uncertainty) through prosody between the ages of 3 and 6 (Armstrong & Hübscher 2018, Moore et al. 1990, i.a.) with some differences depending on specific meanings. Armstrong et al. (2018) showed the importance of cognitive aspects, specifically belief reasoning, in predicting 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. This same developmental window appears to be of importance for evidential development too, for non-intonational marking of evidentiality. Although children begin using evidential morphemes from age 2, adult-like comprehension does not occur until age 4, or even as late as age 6 (Papafragou et al. 2007, i.a.).

In light of the studies mentioned above, we explored children's developmental paths for the comprehension of evidential marking of directly perceived evidence through intonation. We hypothesized that the comprehension of evidential meaning through intonation would coincide chronologically with comprehension of previously-studied non-intonational evidential morphemes. In addition, we explored the relationship between children's general source-marking ability, as well as their ability to make inferences based on directly perceived information. 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 directly-perceived visual and audio evidence, as well as the ability to monitor information source (Papafragou et al. 2007). Our linguistic tasks explored the comprehension of declarative vs. polar question intonation, as well as the detection of evidentiality in *que* + L+H\* L% questions in Majorcan Catalan (Vanrell et al. 2017). Ninety children (ages 3-7) participated in two experimental sessions. Results show that while children make gains in their ability to do source monitoring and make evidence-based inferences during this developmental window, it is not until the age of 7 that there is a significant improvement (71% correct responses) in the ability to detect evidentiality, which is in line with previous research (Papafragou et al. 2007). Our work adds to the recent body of work confirming that intonational development is highly dependent on the types of meaning associated with intonational forms.

### References

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