

Children's development of Quantity, Relevance and Manner implicature understanding and the role of the speaker's epistemic state

Elspeth Wilson (2017) SUMMARY

In learning language, children have to acquire not only words and constructions, but also the ability to make inferences about a speaker's intended meaning. For instance, if in answer to the question, 'what did you put in the bag?', the speaker says, 'I put in a book', then the hearer infers that the speaker put in *only* a book, by assuming that the speaker is informative. The study of the inferences made in communication falls within the field of linguistics known as pragmatics. And, according to Grice (1975) and subsequent neo- and post-Gricean theories, these kinds of implicated meanings involve reasoning about the speaker's epistemic state (the speaker's knowledge). The specific kind of inference just exemplified is known as an 'implicature', specifically a quantity implicature; other types of implicature are 'relevance' and 'manner'. For example, in the context 'where do you want to play?', the hearer can infer from the utterance 'I'll get my coat' that the speaker wants to play outside, by assuming that the speaker is *relevant*; on hearing 'the man made the door close', the hearer can infer that he closed it in an unusual way, by assuming that the speaker means something through his *manner* of speaking.

My thesis examined children's development of implicature understanding. It sought to address the question of what the relationship is in development between quantity, relevance and manner implicatures; whether a particular word learning strategy, known as word learning by exclusion, is a pragmatic forerunner to implicature, or based on a lexical heuristic; and whether reasoning about the speaker's epistemic state is part of children's pragmatic competence. These are important questions, given the links between children's pragmatic skills and their social competence, as well as with inference-making in literacy, and their outcomes for education and wellbeing.

The thesis made a significant contribution to research in experimental and developmental pragmatics by broadening the focus of investigation to include different types of implicatures, the relationship between them, and the contribution of other aspects of children's development to implicature understanding, including structural language knowledge. It made the novel comparison between word learning by exclusion and a clearly pragmatic skill – implicatures – and opened an investigation of manner implicatures in development. It also presented new findings suggesting that children's early competence with quantity implicatures in simple communicative situations belies their ongoing development in more complex ones, particularly where the speaker's epistemic state is at stake.

The thesis presented a series of experiments with children aged 3 to 7 years based on a sentence-to-picture-matching task – where children's understanding of the speaker's meaning is revealed by their picture choice. In the first study, I identified a developmental trajectory whereby word learning by exclusion inferences emerge first, followed by ad hoc quantity and relevance, and finally scalar quantity inferences. This reflects their increasing complexity in a Gricean model but had not previously been demonstrated in a single study. Then, I explored cognitive and environmental factors that might be associated with children's pragmatic skills, and showed that structural language knowledge – and, associated with it, socioeconomic status – is a main predictor of their implicature understanding. Furthermore, there was no evidence that growing up monolingual or bilingual makes a difference to developing implicature understanding. In the second study, I laid out some predictions for the development of manner implicatures, found similar patterns of understanding in children and adults, and highlighted the particular challenges of studying manner implicatures experimentally. Finally, I focussed on children's ability to take into account the speaker's epistemic state in pragmatic inferencing, using a visual perspective-taking task. While adults appropriately did *not* derive a quantity implicature when the speaker is ignorant, children tended to persist in deriving implicatures regardless of speaker ignorance, suggesting a continuing challenge of integrating contextual with linguistic information in utterance interpretation. This challenges the accepted view that taking into account the speaker's perspective is an essential component of pragmatic inferencing.