

Input and intake in the acquisition of indirect evidential meaning

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Background: Indirect evidentials (IEs) indicate that a speaker's evidence for what they are saying is inferred or second-hand. Such meanings present several learning challenges. First, it is assumed that there are few, if any, cues in the environment that children could use to infer the meaning of an IE (1). Second, IEs are also often polysemous, having other meanings such as surprise (2, 3). Such meanings could be more apparent to a learner, and so lead them to posit a meaning other than indirect evidentiality initially. The goal of this project is to understand what English-learning children might infer about the meaning of one IE, the adverb *apparently* (4), based on (A) their input—the way adults use *apparently* around children (i.e. what source of evidence it is used with and what other attested meanings it is consistent with) and (B) their potential intake (which meanings might be accessible to young learners, given the input).

Methods: All tokens of *apparently* produced by adults and used in speech available to children in CHILDES (5) and PhonBank (6) that included audio were identified for potential analysis (n=49). 5 tokens were excluded from analysis because the proposition *apparently* was modifying was missing or uninterpretable, leaving 44 tokens. The children around whom the tokens were produced had a mean age of 1 yr., 10 mos. (range 7 mos. – 4 yrs., 9 mos.). (A) Input analysis: Each token was coded for the speaker's source of evidence, and consistency with five other attested meanings (weak modal strength [4,7], shared information [8], new information/surprise [2,9], feigned surprise [2,9], distancing from authority/responsibility [10]). Tokens could be coded for multiple meanings, to allow for simultaneous polysemy. (B) Intake analysis: Tokens were coded for whether or not the utterance was accompanied by a visible/audible indication of the speaker's source of evidence (i.e., did the speaker look at the evidence just prior to their *apparently* utterance, did the speaker explain their source of evidence?), to understand what information about IE meaning is in principle available to a learner. Tokens from PhonBank's Providence corpus (11), which included video, were additionally coded for whether cues to other meanings were present (e.g. did the speaker raise their eyebrows, indicating surprise?).

Results: (A) Input. 41/44 tokens were used for indirect evidence, 1 for direct, and for 2 the source of evidence was unclear. This is consistent with IE being the primary meaning associated with *apparently*. However, no token was consistent *only* with indirect evidence. The most frequent co-occurrence was indirect evidence plus weak modal strength (13/44 tokens), but all other meanings attested in the literature were found in at least one token: new information=22/44; feigned surprise=1/44; weak modal strength=34/44; shared information=23/44; distancing from authority/responsibility=7/44. (B) Intake. 33/44 tokens were accompanied by an environmental or linguistic cue to the speaker's source of evidence. The 20 video tokens from the Providence corpus were additionally coded for cues to the other attested meanings (was a token consistent with a particular meaning accompanied by a cue to that meaning?). Results were: weak modal strength = 4/15 tokens were accompanied by a cue; social functions=3/5; shared information=0/11; new information/surprise= 5/14; feigned surprise=1/1.

Conclusion: In this corpus, *apparently* tokens are mostly consistent with indirect evidential meaning, and are frequently accompanied by evidence a child could use to infer this meaning.

However, other meanings of *apparently* were frequent and overlapping, indicating a diversity and complexity of meanings in the input to children.

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