

## The acquisition of evidentiality

This paper investigates the acquisition of evidentiality (linguistic encoding of information source) in Turkish and its relation to the acquisition of abstract, mental-state semantic categories in general. Previous studies suggest that the comprehension and use of evidential morphology come in relatively late (Aksu-Koc, 1988). Such difficulties can be explained in terms of two competing hypotheses about the late acquisition of abstract words/morphemes. The *Conceptual Change* Hypothesis (Gopnik & Meltzoff, 1997) claims that children can acquire a particular word/morpheme if the underlying concept is accessible; the difficulty with mental-state terms lies in the abstract nature of the underlying concepts. The *Informational Change* Hypothesis claims that the problem children face with mental state terms is not necessarily a conceptual one but a mapping one: children may represent others' mental states and reason about them but they may not be able to map these states onto the corresponding terms in the lexicon; systematic sources of evidence have to be built up by the learner through accumulating linguistic and observational experience before she can acquire a particular mental-state word (Gleitman, 1990). The research reported here tests predictions of these two hypotheses for the acquisition of Turkish evidentials.

Turkish has two evidential morphemes (EMs), *-DI* (direct evidence) and *-MIS* (indirect evidence, i.e. hearsay or inference): one of these is obligatorily selected for all past-tense events. In this study we first conducted 3 linguistic experiments to test whether Turkish children had acquired the correct (adult) semantics and discourse functions for EMs; next we conducted a non-linguistic source reasoning experiment to see if the necessary source concepts were accessible to children. 30 monolingual Turkish-speaking children that fell into 3 different age groups participated (mean group ages: 3;6, 4;8 and 6;6).

The first linguistic task was an elicited production task: children were shown scenes on a computer screen and had to tell Mickey what happened. The experimenter started describing the scenes as in (1) and children were expected to finish the sentences using either *-DI* or *-MIS*. There were three kinds of trials: 4 involved seeing (the child watched something happen, e.g., a butterfly fly to a house), 4 involved hearing (the child heard someone describe an event), and 4 involved inference (the child saw some hints indicating that an event must have taken place). If children witnessed the event ('see' trials) they were expected to use the EM for direct evidence *-DI*, otherwise they were expected to use the indirect evidence morpheme *-MIS*. Our results show that only children in the oldest age group performed significantly different than chance level ( $t_{\text{see}}(39) = 6.121, p = .000$ ,  $t_{\text{hear}}(39) = 2.333, p = .025$ ,  $t_{\text{infer}}(39) = -4.684, p = .000$ ); the two younger age groups use one of the EMs without evidence of knowledge of evidential semantics. The second linguistic task was a semantic comprehension task conducted to see if children can attribute a sentence with an EM to a speaker that had appropriate access to information. In two separate conditions we contrasted seeing vs. inferring and seeing vs. hearing. Our results show overall poor performance (only the older group's performance on the see/infer type of stories was significantly different than chance: mean: 65%,  $t_{\text{see/infer}}(65) = 2.564, p = .013$ ). The third linguistic task, a pragmatic comprehension task, was conducted to investigate if children trusted a character that used the direct evidence morpheme more than a character which employed the indirect evidence morpheme when the two characters disagreed about a past event. Our results showed that children in all age groups performed around chance level on this task.

Taken together, these tasks confirm that the acquisition of linguistic evidentiality presents difficulties to young learners. To investigate the sources of this difficulty, we next conducted a non-linguistic source reasoning task in which children had to report how they acquired a piece of information (e.g., after watching a dog hide under the bed, they had to say "*I saw it*"). Our results showed that children in all age groups successfully reported the source of their information despite their previous failure in linguistic tasks. These findings are not consistent with the Conceptual Change hypothesis, since children's difficulty with EMs persisted even after children had mastered the conceptual presuppositions of evidentiality (i.e. the underlying source concepts). Rather the delay in EM acquisition seems to be due to the difficulty of mapping evidential morphology to the appropriate source concepts (presumably because of the lack of observable situational correlates of the linguistic distinction), as claimed by the Informational Change hypothesis.

## References

- Aksu-Koc, A. (1988). *The Acquisition of Aspect and Modality: The case of past reference in Turkish*. Cambridge: Cambridge University Press.
- Gleitman, L. (1990). The structural sources of verb meaning. *Language Acquisition*, 1, 1-55.
- Gopnik, A., & Meltzoff, A. (1997). *Words, thoughts, and theories*. Cambridge, MA: MIT Press.

## Experiment 1:

- (1) kelebek ev -e uc -.....  
butterfly house-DAT fly-.....  
'The butterfly (has flown) to the house'