

The effects of syntax on the acquisition of evidentiality

There have been several recent studies of the acquisition of evidentiality as it is encoded in morphemes like aspect markers ([6], [8], [1]), tense markers ([7]) and embedding verbs ([4]). Because evidentiality is not the sole or primary semantic component of these morphemes, it is hard to isolate evidentiality in these studies. In English, evidentiality is syntactically encoded in copy-raising constructions (CRCs): CRCs with raised subjects (1) can only be felicitously uttered by a speaker with direct evidence for the proposition, while CRCs with expletive subjects (2) are consistent with the speaker having either direct or indirect evidence.

In this paper, we examine the acquisition of evidentiality in English-speaking children ages 2 to 5 by looking at their spontaneous production of CRCs. Our study is based on an exhaustive examination of 45 American English corpora in the Childe database [5]. We show that children as young as two behave like adults in their ability to correlate the syntax of these constructions with the type of evidence they have. Additionally, we present the results of an adult experiment which provide the standard against which we compare the child data.

Our adult experiment (n=90) tested the acceptability of raised and expletive CRCs in different evidential scenarios, exemplified in (3). Subjects showed a significant preference for expletive CRCs in every condition (Table 1 shows the response (from 1, 'OK' to -1, 'Weird') for *seem*, which was representative). Statistical analysis revealed significant main effects of syntax and evidence ($p < .001$), as well as a significant interaction effect ($p < .001$). Adults show an overall preference for expletive CRCs, and there is a direct correlation between the syntactic configuration of these CRCs and the type of evidence available to the speaker: raised CRCs are only compatible with direct evidence, expletive CRCs are compatible with both direct and indirect evidence. These results are contrary to the predictions in [3] but consistent with the predictions and analysis in [2], in which perception verbs (and *seem*) assign perception-source theta-roles to their external subjects in CRCs.

In our acquisition study we searched for all instances of CRCs with the predicates *seem/look/sound like*. Like the adults in our experiment, the children favored expletive CRCs (n=35) to raised CRCs (n=30), although this difference is not significant. Importantly, the children showed an adult-like distribution of CRCs: while expletive CRCs were uttered in both direct (n=20) and indirect evidential contexts (n=15; see (4)), raised CRCs were uttered exclusively in direct evidence scenarios (n=30; see (5)). Table 2 presents the overall findings.

These results contrast in interesting ways with studies of morphologically-encoded evidentiality. They are contrary to the conclusions in [6], [7] and [4] that suggest a relatively late mastery of indirect evidentials, possibly for TOM-related reasons. Additionally, this evidence of the early use of evidentials does not support the (neo-Whorfian) language>concept idea [1], viz. early attention to evidential source does not depend on having a language with obligatory, morphologically encoded evidentiality.

(Word count: 489)

Examples

1. John looks like he is sick. Raised CRC
 - a. speaker sees John; he looks tired and feverish direct
 - b. #speaker sees John's doctor's note indirect

2. It looks like John is sick. Expletive CRC
 - a. speaker sees John; he looks tired and feverish direct
 - b. speaker sees John's doctor's note indirect

3. **Direct audio condition:**
Fola is sitting in her office, which is next to the Pierre's office. Fola overhears John go into Pierre's office and address him in a foreign language. Fola knows Pierre only speaks French, so she says:
 - a. John seems/looks/sounds like he can speak French. Raised CRC
 - b. It seems/looks/sounds like John can speak French. Expletive CRC

4. a. Well it looks like I got all the Rabbits (Abe 47b1) Expletive CRC – direct
 b. (building a puzzle) Looks like there's another piece. (alltp1) Expletive CRC– indirect

5. Dat clay doesn't look like it's sticky (.) but it is!! (Adam 52) Raised CRC – direct

Table 1: seem

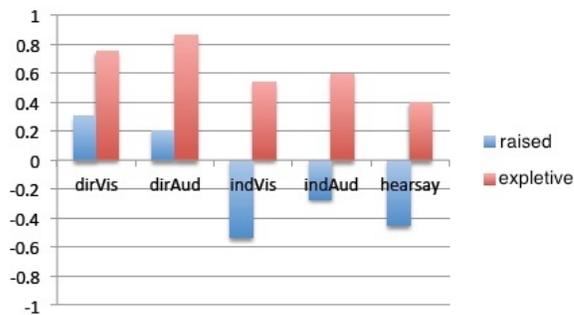
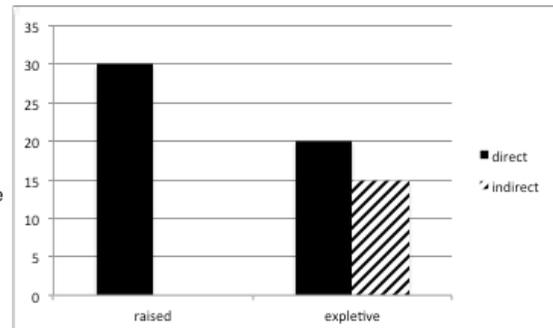


Table 2: CHILDES data



References

- [1] Aksu-Koç, A., Balaban, H. Ö. & Alp, İ. E. *in press*. "Evidentials and source knowledge in Turkish." *New Directions in Child and Adolescent Development*.
- [2] Asudeh, A. and Toivonen, I. 2012. "Copy raising and perception." *Natural Language and Linguistic Theory*. 30:2, 321-380.
- [3] Grimm, S. 2010. "An empirical view on raising to subject." In Weirich, M. and Jannedy, S. (eds.) *ZASPiL* 25, 83-110.
- [4] Koring, L. & de Mulder, H. 2011. "Understanding different sources of information: conceptual and linguistic development." *Proceedings of the Tenth Tokyo Conference on Psycholinguistics*, 143-166. Hituzi Syobo Publishing.
- [5] McWhinney, B. & C. Snow. 1985. The Child Language Data Exchange System. *Journal of Child Language*, 12, 271-295.
- [6] Ozturk, O. & A Papagragou 2008. "The acquisition of evidentiality and source monitoring." *BUCLD* 35; 368-377.
- [7] Papafragou, A., Li, P., Choi, Y., & Han, C. 2007. "Evidentiality in language and cognition." *Cognition*, 103: 253-299.
- [8] de Villiers, J., Garfield, J., Gernet-Girard, H., Roeper, T. and Speas, M. 2009. "Evidentials in Tibetan: Acquisition, semantics and cognitive development." *New Directions for Child and Adolescent Development* 125: 29-47.