Referential cohesion in Swedish pre-school children's narratives

Josefin Lindgren[1] & Jorrig Vogels[2]
[1] Uppsala University
[2] Saarland University

Referential cohesion is an important part of any type of discourse, as speakers use referring expressions to glue utterances together. In a coherent discourse, pronouns are typically used for referents that are currently in the focus of attention, while more elaborate expressions, such as definite noun phrases, are required when the referent is less salient (e.g. Ariel, 1990; Grosz, Joshi, & Weinstein, 1995). Choosing an appropriate expression thus requires the speaker to continuously keep track of the salience of referents in the discourse. In addition, it requires the use of complex linguistic skills, including pragmatic competence, as well as theory of mind. Because maintaining detailed models of the ongoing discourse is cognitively challenging, it is expected that children have problems choosing referring expressions properly to create a coherent discourse. Indeed, it has been shown that children aged 4–6 often overuse pronouns, including pronouns that are unrecoverable by the listener (e.g. Hendriks, Koster, & Hoeks, 2014; Karmiloff-Smith, 1985).

The question is when and how children learn to choose referring expressions such that it results in a coherent discourse. If they do not maintain detailed models of the discourse, what other strategies do they use to determine what type of referring expression to choose? To investigate this, we analyzed the referring expressions in oral narratives produced by 72 monolingual Swedish-speaking children aged 4;0–6;10.

The narratives were elicited using picture stimuli of the Multilingual Assessment Instrument for Narratives (MAIN, Gagarina et. al., 2012). Characters in the stimuli (the stories Cat and Dog) included a boy, several animals, and a number of inanimate objects. The children told their stories to an adult listener who could not see the pictures. All references for which the referent could be identified were coded according to function (introduction, reintroduction, maintenance), topichood (topic, non-topic), animacy of the referent (human, animate, inanimate) and form of referring expression (e.g. pronoun, definite noun phrase). Only results from referent reintroduction and maintenance are reported here.

As expected, the children did not always produce referentially coherent narratives. Notably, they often used pronouns to reintroduce characters, even when these pronouns were ambiguous or misleading. Interestingly, the majority of these unrecoverable pronouns referred to the boy. This suggests that children follow a strategy of pronominalizing human referents, irrespective of whether these are salient in the local linguistic context. Although the six-year-olds did not seem to perform differently than the four-year-olds in this respect, they produced fewer ambiguous or misleading referring expressions. They also seemed to be more sensitive to whether the referent was topical or not.

The results will be discussed in light of theories suggesting that the accessibility of discourse entities can be measured at multiple levels, more locally or more globally (e.g. Kaiser & Trueswell, 2008; Vogels, 2014). We propose that children at first overuse global factors such as animacy to determine how accessible a referent is, only later learning to include more local factors such as topichood.

(486 words)

References

Ariel, M. (1990). *Accessing noun-phrase antecedents*. London: Routledge.

Gagarina, N., Klop, D., Kunnari, S., Tantele, K., Välimaa, T., Balčiūnienė, I., Bohnacker, U., & Walters, J. (2012). MAIN: Multilingual Assessment Instrument for Narratives. *ZAS Papers in Linguistics*, *56*.

Grosz, B. J., Weinstein, S., & Joshi, A. K. (1995). Centering: A Framework for Modeling the Local Coherence of Discourse. *Computational Linguistics*, *21*, 203-225.

Hendriks, P., Koster, C., & Hoeks, J. C. J. (2014). Referential choice across the lifespan: why children and elderly adults produce ambiguous pronouns. *Language, Cognition and Neuroscience*, *29*(4), 391-407.

Kaiser, E., & Trueswell, J. C. (2008). Interpreting pronouns and demonstratives in Finnish: Evidence for a form-specific approach to reference resolution. *Language and Cognitive Processes, 23*(5), 709-748.

Karmiloff-Smith, A. (1985). Language and cognitive processes from a developmental perspective. *Language and Cognitive Processes, 1*(1), 61-85.

Vogels, J. (2014). *Referential choices in language production: The role of accessibility*. PhD dissertation, Tilburg University.