

Causation and motion in developing narrative coherence: a comparative study in Hebrew as L1 and L2

Storytelling requires the contextualization of language forms into a coherent and cohesive discourse frame, involving parallel cognitive and linguistic processes (Hickmann, 2004; Karmiloff-Smith, 1985). Recent developmental research has revealed a common developmental pattern towards increasing cohesion and coherence in monolingual children's narratives across languages (Berman & Slobin, 1994). However, little is known about the interaction between these two domains of discourse construction in a bilingual situation, where a gap may exist between socio-cognitive and linguistic abilities. The present study thus investigates the linguistic expression of developing narrative coherence in the picture-based oral narratives elicited from 34 sequential bilinguals acquiring Hebrew as L2 at two times -- ages 6 and 8. Narratives produced in Hebrew as L1 by a group of age-matched children and a group of adults served as control.

The analysis focuses on the development of particular linguistic forms to express the complex integration of four types of causal relations: psychological, motivational, enabling and physical (Trabasso et al., 1989; Trabasso & Nickels, 1992), relevant for the encoding of the story episode. In this particular story, mention of a prototypical motion event involving figure, ground, path and motion are crucial for the expression of the causal chains (Talmy, 2000). Due to this complexity, we expected that the expression of these discourse-internal relations could be challenging for younger children in general and for Hebrew L2 children in particular. Results showed an increase in expression of causal relations in both monolingual and bilingual narratives. At age 6, psychological and physical causation were the most frequent. Causation and motion were expressed at the level of the isolated pictures, driven mostly by perceptual saliency and spread across clauses with high reliance on local, temporal chaining of the events. At age 8, internal-motivational and physical-spatial relations became more integrated and expressed by varied lexical and morpho-syntactic means, reflecting a tighter connection between the events in the narrative, although certain relations had to be inferred. Among speakers of Hebrew as L2, lack of lexical accuracy and lexical repetition resulted in poorer cohesive ties that affected overall text coherence. Compare, for instance, the linguistic expression of the protagonists' motion towards the ground (the table) in an attempt to reach the goal (the bee) in (translated) Hebrew as L1 and L2 at age 8, respectively: '*and the cat jumped onto the table and tried to kill the bee*' versus '*and suddenly the cat jumped onto the bee. And the cat accidentally jumped onto the dining table*'. When compared with adults, the main difference lied in the integration of cause and motion together in compact linguistic constructions that reflected both linguistic sophistication and global strategies of discourse construction (e.g., *the cat jumped towards the bee straight onto the table*).

The study demonstrates that focusing on the role of linguistic forms in referring to chains of connected actions in narrative production can shed important light on the interacting cognitive and linguistic development in monolingual and bilingual children.

References

- Berman, R.A. & Slobin, D.I. (1994). *Relating events in narrative: A crosslinguistic developmental study*. Lawrence Erlbaum Associates.
- Hickmann, M. (2004). Coherence, cohesion, and context: some comparative perspectives in narrative development. In S. Strömquist & L. Verhoeven, eds. *Relating events in narrative: Typological and contextual perspectives*. Mahwah, NJ: Lawrence Erlbaum, pp. 281-306.
- Karmiloff-Smith, A. (1985). Language and cognitive processes from a developmental perspective. *Language and cognitive processes, 1*, 61-85.
- Talmy, L. (2000). *Toward cognitive semantics: Vol. 2. Typology and process in concept structuring*. Cambridge: MA, MIT Press.

- Trabasso, T. & Nickels, M. (1992). The development of goal plans of action in the narration of a picture story. *Discourse Processes*, 5, 249-611.
- Trabasso, T., van den Broek, P. W., & Suh, S. Y. (1989). Logical necessity and transitivity of causal relations in stories. *Discourse Processes*, 12, 1-25.