Constructional variation in the encoding of PATH and GROUND information in child-adult interaction in L1 German

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Background: German as a satellite-framed language (Talmy 2000) provides speakers with a variety of constructions for the expression of PATH information outside the verb, e.g., prepositional phrases (PP) (1) or directional particles (2):

(1) *Das Mädchen rennt [in das Haus]*$_{PP}$. lit.: 'the girl runs into the house'
(2) *Der Junge rennt [rein]*$_{v\text{-}part}$. lit.: 'the boy runs there-in'

However, a less common and mainly colloquially used lexicalization pattern has not been topic to research in greater detail, namely pleonastic constructions (PLEO). The specificity of PLEO is in the duplication of the PATH information in both a PP and a semantically-congruent locative or directional particle (underlined in example 3):

(3) *Die Kinder rennen [in das Haus rein]*$_{PLEO}$. lit.: 'the children run in the house into'

Constructions (1)-(3) show different degrees of complexity in terms of their structural properties and informativeness. To verbalize spatial settings in a pragmatically adequate manner, children are required to learn the subtle differences between such closely related construction types. However, not much is known about the interplay of different PATH constructions in spatial language acquisition.

Aims of this study: This study aims at filling this gap by exploring PLEO as part of the German PATH inventory and their role in children's way towards an adult-like usage of PATH constructions. Quantitative and qualitative approaches are combined to answer the following research questions: i) How frequent are PLEO in spontaneous child (directed) speech in German? ii) In how far are PLEO used in naturalistic child-adult dialogue to co-construct motion event descriptions across turns? The methodology draws on constructionist (Goldberg 2005) and usage-based approaches (Behrens 2009) by taking different levels of abstractness and the input language into account.

Data and analyses: Longitudinal corpora with a total of 193'052 utterances from 3 monolingual German children (observation time: 2;0-7;11) in interaction with their caregivers are analyzed (Rigol-Corpus, Lieven & Stoll 2013). To answer i), all instances of PLEO and non-pleonastic constructions (PP and locative/directional particles) are identified and compared in terms of their frequency in the course of development. Question ii) is addressed by detecting patterns of constructional variation between PLEO and other means for PATH encoding in dialogic contexts.

Results: Preliminary results on selected parts of the data show that children make use of PLEO from early on (age 2;0) and that the proportion of PLEO and non-pleonastic constructions is similar to adults. Children's use of PLEO becomes more creative in the course of development, that is, they use more different slot fillers with age. The discourse analysis reveals that the use of PLEO is often conjoined by particle constructions in preceding or succeeding turns referring to the same motion scene. This indicates that maximally-informative PLEO seem to be extended or reduced to semantically and syntactically less dense particle constructions.

Relevance: The acquisition of the complex system of PATH constructions in German has been described as challenging (Bryant 2012). This study may add to a better understanding of how children expand their constructional inventory in accordance with their input language, and how constructional choices are furthermore influenced by discursive factors. Moreover, the findings may contribute to authentic and learner-oriented intervention material in order to support children's proficiency in spatial language – an essential skill predicting mathematic thinking and understanding (Möhring et al. 2021).

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