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A variety of semiotic relations in the process of language acquisition

Language learning is traditionally thought of as a function of internal rules (either inborn or learned) that concern the structure of linguistic input. On such view, language is mostly isolated from its pragmatic context, treated as a separate cognitive skill, and acquired on the basis of linguistic 'data'. In our paper we draw on more functional approaches to language and on the view that language can be treated as a system of constraints on dynamics of action and cognition both on the individual and on the collective level. According to this view, it is crucial for language development that it is always immersed in rich dynamical and structured co-action.

In this paper we integrate such a view of language (based on the works by Pattee & Rączaszek-Leonardi, e.g., 2012) with an approach that can help identifying the variety of constraining relationships, based in semiotics (Deacon, e.g., 1997, 2011). By a careful microanalysis of real parent-infant interactions we show that on the way to becoming a symbolic activity, the utterances of language have to be involved in other types of semiotic relations. In order to do this, first we identify the relevant dynamics in which such utterances appear, showing that it is already meaningfully (intentionally) structured. Next, we show examples of iconic and indexical relations in which utterances of language are involved. Finally, we stipulate on necessary preconditions for the utterances to become truly symbolic.

By joining the two abovementioned approaches to language, we thus show how language becomes a control on interaction in the developmental time-scale. Engagement of linguistic forms in a variety of other semiotic relations provides a rich semiotic infrastructure, on which symbolic meaning can built. This view shows both how linguistic forms are grounded and provides mechanisms for their (partial) un-grounding to become symbolic.