

“Tracking conceptual development in early representational gesture production and social interaction”

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The building of concepts in the child is not directly accessible to the observer. Yet, from past studies that focused on infant’s communication repertoire, we know that the first attempts at expressing something about the surrounding world to an addressee show in gestural behaviour: pointing to an object, waving hello/goodbye, applauding, requesting to be picked up, etc. (Bates et al., 1979; Capone & McGregor, 2004; Cochet & Vauclair, 2010). Older children in their second year of age start to represent actions and objects using gestures that have iconic properties, such as pretending to drink/eat with an empty cup/spoon – what is named as pretend play –, and gestures – actions performed with an empty hand – such as miming drinking or eating, phoning or falling, sketching “big or “small”, etc. (Acredolo & Goodwin, 1988; Capone & McGregor, 2004; Moro & Rodrigues, 2005; Piaget, 1959; Werner & Kaplan, 1963). Over the past decade, several studies have investigated the relation between actions, gestures and words and the results support the idea that the trajectory to word production builds not only on word comprehension, but also on practical action with objects, mime and gesture (Andren, 2010; Capirci et al., 2005; Caselli et al., 2012; Dimitrova, 2012). All in all, despite the major contribution of pointing behaviour to index referents and learn how to name them, the emergence of concepts is more likely to be tracked for in the child’s gestural attempts to represent the world prior to and while naming it. From studies that used a picture naming task to elicit representational gestures (Stefanini et al., 2009; Pettenati et al. 2009, 2012; Marentette et al., 2016), we know that their production is sensitive to the type of referent, with children gesturing to refer to actions more often than to refer to objects, and to inner properties of referents, with children gesturing more often to refer to objects that are small, that have dynamic properties and that one can easily handle, than to other objects.

Our team has recently collected data out of 60 French children aged between 22 and 40 months who were administered the Italian PiNG naming task adapted to French (<https://gestland.eu>). The data shows gesture production and morphology – as indexing conceptual knowledge – to vary a lot between children, with both age and ability to name the related linguistic target to explain such variation. However, studies on early representational gesture production rely mostly on experimental or semi-experimental paradigms that do not question the role of context and the addressee. To understand the impact of the later, we will run a longitudinal pilot study on a small sample of French speaking families with children aged between 18 and 24 months whose lexicon repertoire will be assessed using the French version of the MB-CDI (*Inventaire Franais du D veloppement Communicatif*). We will follow three children longitudinally by visiting them four times over the course of one year to video record spontaneous interactions between the child and her/his caregivers. Each play session will include the introduction of the PiNG tool by the caregiver getting the child to name and play with a subset of the pictures so that part of the concepts exposed to the child are common across families. We will examine speech, gesture and social interaction annotating all interactions on *ELAN*. We will then 1. track changes in the relation between the child’s gestures and her/his vocabulary both at the type-token use level and at the gesture-word morphology level; 2. examine the relation between such changes and contextual features (i.e. data from the IFDC parental report, the caregiver’s linguistic and gestural input during the play session, social practice and actions during interaction).

The student who will participate in the study will be involved in the collecting, annotating, and analyzing of the data from the first two visits to families.