

Children's acquisition of the notion of reference time: constructing a world within language

Sophie de Pontonx¹, Christophe Parisse²

¹CNRS, MoDyCo, Paris Nanterre University; ²INSERM, MoDyCo, Paris Nanterre University
sdepontonx@parisnanterre.fr, cparisse@parisnanterre.fr

Keywords: Language Acquisition, Time, Tense, Semantics, Displacement, Spontaneous Language

Weist (1986) suggests that the development of the concept of time in the course of child language acquisition goes through several main stages, organized according to the principles of Reichenbach's model (1947). In the final stage of this model, children develop the concept of reference time. They thus become capable of manipulating reference time separately from speech time and event time and to produce speech, from the point of view of someone who would be in the past, or in the future. In parallel, they develop the ability to tell stories or talk about imaginary people, objects or events.

This final stage in the ability to use the concept of time raises a fundamental issue: how do children learn to speak about what does not exist in the real world and only exists through language? This is fundamentally different from what they do in their first years. During that time, they speak either about things that they perceive in the here and now or about things that they do not perceive in the here and now (see Bronckart and Sinclair, 1973), but that they have perceived before and have thus memorized (see Weist, 1986). During their first years, children use linguistic forms to refer to objects or situations they have experienced in their daily lives. To manipulate reference time, children have to learn concepts, that they can create through language only. They learn that linguistic forms can be used to refer to meanings that are only experienced through language and have no perceivable referents in the outside world. Specific linguistic forms must thus exist and be used to express a switch of reference time.

Our proposal is that there are indeed such forms, and that children find them in their input. They are used for displacements of reference time. Children will remember these uses (their forms and their functions), and reproduce them later on. One of those forms in French is the *imparfait*. This tense marks a displacement between the speaker and the here and now (Patard, 2007), and is not frequently used before age three (see Parisse, Pontonx & Morgenstern, 2018). It can have several functions, but most of those functions, including in children's own productions, correspond to a change in reference time (see Parisse et al., 2018, a fine-grained analysis of 10 one-hour sessions with two children).

Our proposal is that children hear the *imparfait* in their input mostly in situations that are clearly associated with displacements of reference time. When they produce the *imparfait* themselves, they will reproduce the adult use.

We tested this hypothesis on the longitudinal data of seven French-speaking children videotaped monthly in spontaneous interactions with their parents (Paris corpus: Morgenstern & Parisse, 2012), representing 229 hours of speech and 1.3 million words. We coded the sequences as corresponding to several genres: book reading or manipulation, narratives without books, play, pretend play, and all other situations. These genres were targeted because they are either displaced and are good candidates for switches of reference time, or are non-fiction (all others) and correspond to situations that are grounded in the here and now. The results showed that for some genres such as narratives without books, the *imparfait* was used twice more than in other situations. This trend was even stronger when talking about memories (narratives). It was the case both for adults and for children. In another situation, pretend play, in our recorded sessions, only the children used the *imparfait*, which could suggest that children now have the ability to generalize the use of the *imparfait*. Following this study, our proposal is that children can find exemplars of language use in specific situations with specific forms (such as the *imparfait*). Those forms do not only have a function associated with a switch of reference time, but they also serve as reference forms that do not refer to specific objects of the world but refer to concepts only expressed through language.