Summary

Communicative skills of toddlers develop rapidly when they produce two-word phrases combined with gestures, or when they are about two years old. This advancement in children's general knowledge of language may lead to changes in their perception of gestures that accompany speech. Empirical studies show that children produce speech and gestures spontaneously, that they mimic communicative behaviours of others, and that they understand and produce gestures that aid verbal communication. However, there is not much experimental evidence on the period when the shift in the sign function likely happens: when children between the ages of 2 and 3 start to perceive isolated gestures as potentially informative components of communication.

In the dissertation entitled 'Mind the Gap! Sign function emergence in the second year of life and beyond', I focus on the role of gestures in language development of children at the ages of 24-, 30- and 36-months. The purpose of the thesis is to trace the emergence of sign insight—the ability to consciously perceive signs as vehicles for meaning—and to check whether it emerges earlier in gesture than it does in speech. Linguistic studies show that during the observed period, children start to understand the function of signs, and use them in an increasingly conscious way, in spite of semiotic system.

In my research I ask questions about the development of silent gestures in language acquisition. Is it possible that these gestures, even though presented without speech, convey messages children can interpret correctly? In the thesis, I look at this phenomenon and focus on speech and two kinds of iconic gestures:

- enacting gestures; and
- representing gestures;

in the three groups of children. I ask three research questions:

1. Research question 1 (RQ1) concerns the change in the perception of iconic gestures that is linked to age: Does the understanding of signs produced in speech and gesture change in the transition period between the ages of 24- and 36-months?

2. Research question 2 (RQ2) concerns the dynamics of change in children's understanding of iconic gestures: Is there a difference in children's comprehension of different types of iconic gestures? More specifically, I ask if it

is easier for children to comprehend one type of gesture over the other. I also ask if the change in comprehension of iconic gestures is related to age.

3. Research question 3 (RQ3) concerns children's ability to understand gestures as signs prior to children's ability to understand linguistic signs: Does the understanding of representational expressions in speech precede or follow the understanding of iconic gestures?

The experimental part of the design is based on a forced-choice guessing game task focused on comprehension. The task of a child is to select one out of four images that, in line with their knowledge and experience, matches the gesture or words presented to them by the researcher. Each child guesses 12 items in 3 consecutive rounds (36 answers in total). The answers are coded for correct and incorrect matches and analysed quantitatively and qualitatively.

The dissertation is composed of five parts. In Chapter 1, I present the fields of linguistics, psycholinguistics, and cognitive semiotics, and outline their most important assumptions in relation to research on gesture. I define the terms that are used throughout the thesis. I also describe the meaning of the project to the stages of semiotic development of children. In Chapter 2, I first present the background on child development that I tackle in 6-month-long intervals: from birth to the third 18year of a child's life. I also present the research background of the project, which is scarce with regard to gesture comprehension in children. I discuss the gap I see in the two kinds of child development models and criticize the time periods they select to make observations on children's emerging skills and abilities in terms of language and gesture. In Chapter 3, I present the design of my study and methods used in the experiment. I outline the procedure and provide a detailed description of the groups I work with. Chapter 4 is divided into two parts: in Part 1, I present the results of the quantitative analysis of the gathered data and discuss them in the summary of Part 1; in Part 2, I present the results of the qualitative analysis of the gathered video footage and look at the behaviours the children present throughout the experimental interaction. In Conclusions, I summarize the results, I close the conceptual-empirical loop with an updated table on the semiotic development of children, describe limitations of the project, and outline future directions for research in gesture studies.

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