While it is already known that parents modify their demonstrations towards children (Brand et al., 2002; Brand et al., 2007) and that young infants aged 6 to 8 months prefer ‘motionese’ (Brand & Shallcross, 2007), little is known about whether the modified behavior can also be found in interaction with older children. Here, we therefore seek to investigate the effects of children’s age on motionese, defined as modified action demonstration (Brand et al., 2002; Rohlfing et al., 2006).

In our study, parents demonstrated a function of an object (stacking cups) towards their infant and towards another adult. We analyzed parental behavior in three different age groups: parents of prelexical (8 – 11), early lexical (12 – 24) and advanced lexical (25 – 30 months old) children. In our analysis, we use objective measurements of hand trajectories providing data about their shape and time structure. Results suggest that actions chosen to attract attention by providing more motion-range can primarily be found in interaction with younger infants, whose attention needs more guidance. Interactions with older children seem to benefit either from the increase of children’s attention abilities or that parents use other means (such as language) to attract their attention. In contrast, parameters that appear to be more in charge of structuring the action by organizing it in motion pauses seem to persist over the age and verbal capabilities.

**Results and Discussion**

A repeated measures ANOVA with interaction condition (AC/AA) as within-subjects and infants’ age as between-subjects factor revealed a significant main effect for the interaction condition for all measures (p<0.001), except range. Subsequently, paired t-tests were conducted for the three age groups separately. For the range measure, we found significant differences between the conditions only in group 1 for subaction 3 (k(t)=2.55*) and marginal significance for subaction 2 (k(t)=2.15*). This suggests that the modified range of hand movements is present only in demonstrations towards pre-lexical infants. We think the reason is younger infants’ need of gestures to attract their attention. The pace measure shows significance for groups 1 (k(t)=4.95**) and 3 (k(t)=2.82*), which suggests that pace in interactions with infants of all three age groups remains higher than in the AA condition. For motion pauses, we found significant differences for age groups 2 (k(t)=3.79*) and 3 (k(t)=2.45**) and a trend for group 1 (k(t)=3.24*). Pauses structuring the shown action seem to be used over all age groups. For the eye gaze measure, a decrease in significance could found be over the children's age: In the AC condition, the interaction partner was gazed at significantly longer in groups 1 (k(t)=3.96**), 2 (k(t)=3.16**) and 3 (k(t)=3.34**) and objects were gazed at significantly less in groups 1 (k(t)=3.98**) and 2 (k(t)=3.62**) suggesting that the young infants' attention is more often checked on. **Discussion**

Actions chosen to attract attention can primarily be found in interaction with younger infants, whose attention needs more guidance. Interactions with older children seem to differ due to either the increase of children's attention abilities or that parents use other means to attract their attention. In contrast, parameters that appear to be more in charge of structuring the action seem to persist over the children’s age and their verbal capabilities.

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**References**