Canonical babbling and the word acquisition process: Results of infants acquiring German

Advancements in the early phases of speech acquisition, especially the amount, complexity and diversity of infants' vocalizations in the canonical babbling phase, have been found to be predictive for later language outcomes (Stoel-Gammon, 1992). However, for understanding the infants' pathway from babbling to the onset of words more longitudinal studies investigating factors influencing this pathway are needed. As most of the studies to date have been conducted on infants acquiring English and studies on children acquiring German are rare, the question arises to which extend current knowledge on English holds true for German. The aim of the present study, therefore, is to investigate the correlation between the onset, the amount as well as the complexity and diversity of infants' canonical syllables in the second half of their first year of life and their word acquisition process in their second year of life.

In a prospective longitudinal research design, the speech acquisition process of 20 monolingual German infants is investigated. Mother-child interaction sequences were videotaped on a monthly basis for the first 18 months. Of each analyzed sample 50 consecutive utterances were transcribed using the IPA as well as some additional descriptive signs. Vocalizations were classified according to two measurements: the Canonical Babbling Ratio (CBR; Oller & Eilers, 1988) and the Mean Babbling Level (MBL; Olswang, Stoel-Gammon, Coggins, & Carpenter, 1987; Stoel-Gammon, 1989). The word acquisition process is examined in two ways. First by a parental CDI questionnaire (ELFRA-1 and ELFRA-2, Grimm & Doil, 2000) at the ages 12, 15, 18 and 24 months and second by an analyses of the children's spontaneous speech samples concerning word productions.

Results of this research in progress for 10 infants analyzed so far show significant correlations between the age of onset of canonical babbling and the CBRs and MBL-scores at 9 months. The a) onset of canonical babbling, b) CBRs at 9 months, c) MBL-scores at 9 months and d) numbers of different consonant types at 9 months were associated with the amount of words derived from the parental questionnaires at age 18 months. However, correlations did not prove to be significant. Further the individual data show a high amount of variability when comparing CBR- and MBL-scores as well as the phone inventories at age 9 months with vocabulary sizes of the CDIs at any time.

In conclusion, for the infants analyzed so far the age of onset of canonical babbling was found to be predictive for the amount as well as the complexity of babbling at 9 months. Babbling skills at 9 months were found to be connected with vocabulary sizes at 18 months but could not be shown to be predictive. It will be investigated to which extend the data of the further 10 children will strengthen the current findings. Moreover, the relationship of babbling and word onset based on the children's utterances in the speech samples instead of the so far analyzed CDI data will be presented.

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