

**Looking and leaping:
Shared gaze and movement by 14-month-old infants in a word association task**

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We used measures of both looking time and movement to better understand the interaction of fourteen-month-old infants and an experimenter in a minimal pair word object association task. Previous work has used looking time alone to show that infants at this age fail to learn an association between two novel objects and two syllables differing in only one sound, when the syllables are delivered electronically (Stager & Werker, 1997). We tested infants in a similar habituation/dishabituation procedure, using identical objects. However, in our study, an experimenter was present, delivering the auditory stimuli to the infant, making eye contact with the infant, and looking at the object as well. Looking time measures revealed that those infants who shared a greater amount of gaze with the experimenter (i.e., spent more time eye-to-eye with the experimenter) were successful in learning the pairings. Measures (made automatically and non-invasively) of the overall amount of movement of each infant during the task for both the high-shared gaze group and the low-shared gaze group were also examined and compared with results from looking time data alone. Movement measures showed, in fact, that all infants succeeded in the task; however, the movement data for the two groups patterned in opposite ways (Fais et al., 2012). In the present work we examine the direction of movement exhibited by the infants in order to understand better the relations among: social referencing (i.e., infant looking to the experimenter in the course of the task); patterns of gaze sharing between infant and experimenter; movement as an indication of attention; infant inclination toward and away from the experimenter, and infant ability to associate novel objects with minimal pair nonsense syllables. Movement measures give us unique insight into the interaction of infant and experimenter in navigating this language-learning milestone.