Caretaker-infant attachment is a complex but well-recognized adaptation in humans. An early instance of (or precursor to) attachment behavior is the dyadic interaction between adults and infants of 6 to 24 weeks, commonly called "babytalk." Detailed analysis of 1 minute of spontaneous babytalk with an 8-week infant shows that the poetic texture of the mother's speech—specifically its use of metrics, phonetics, and foregrounding—helps to shape and direct the baby's attention, as it also coordinates the partners' emotional communication. We hypothesize that the ability to respond to poetic features of language is present as early as the first few weeks of life and that this ability attunes cognitive and affective capacities in ways that provide a foundation for the skills at work in later aesthetic production and response. By linking developmental social processes with formal cognitive aspects of art, we challenge predominant views in evolutionary psychology that literary art is a superfluous byproduct of adaptive evolutionary mechanisms or primarily an ornament created by sexual selection.

KEY WORDS: Aesthetic response; Attachment behavior; Babytalk; Dialogue; Diction; Foregrounding; Infant abilities; Literary analysis; Literary theory; Meter; Mother-infant communication; Mutuality; Phonetics; Poetics; Sexual Selection

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The quality of the interaction between an infant and its primary caregiver—usually its mother—has significant implications for the infant’s later life as a child and adult. For both evolutionary biologists and psychotherapists perhaps the most important contributions to an understanding of this relationship have been based on attachment theory, stemming from the work of John Bowlby. A child psychiatrist with an interest in ethology, Bowlby postulated that infants have a positive need to form what he called “attachment” with caretakers. In this paper we focus on an early component of attachment behavior not described by Bowlby, the “babytalk” of mother and infant.1 Through detailed analysis of a transcript of a mother’s dialogue with an 8-week-old baby we show that babyltalk displays remarkable and systematic features that serve to create and maintain interpersonal coordination (called here “mutuality”), which precedes and provides a scaffolding for subsequent attachment. In addition, we argue that the “poetic” nature of such features deserves consideration as a foundational (or “proto-aesthetic”) phase of temporal arts, such as literary language and music, that we create and experience as adults.

In the first volume of his pioneering three-volume treatise, Bowlby (1969) described attachment as a complex of behaviors that serve to maintain an infant’s proximity to a specific caretaker. He further hypothesized that the evolutionary value of proximity-seeking to the helpless hunter-gatherer baby was that it would not wander far away, and when frightened or alone, it would cry, reach out, move toward, or otherwise try to resume contact with a specific protective figure, rather than remain vulnerable to predators or accidents. Comparable behaviors have been observed in the dependent young of many bird and mammal species.

Classical attachment as described by Bowlby and his followers is not expressed until around 8 months, when most babies are first mobile.2 Before that, they are usually carried and thus already physically “attached.” However, in the years since Bowlby’s formulation, research with much younger infants has shown the significance of innate predispositions for interaction and intimacy (Beebe et al. 1979; Brazelton et al. 1974; Jaffe et al. 2001; Stern 1971, 1985; Stern et al. 1985; Trevarthen 1977, 1979a, 1979b, 1980; Tronick et al. 1979). These studies, and many others, have indicated remarkable propensities for social interaction in neonates and very young infants. Although the studies have been conceived within other theoretical perspectives—e.g., psychotherapy, psycholinguistics, or general developmental psychology—their implications are pertinent to theoretical concerns and interpretations within evolutionary psychology.

From the early weeks of their first year, infants demonstrate a complex set of presymbolic representational capacities (Beebe et al. 1997) that predispose them to interaction with others. A few minutes after birth, for example, a neonate shows a preference for its mother’s voice, which it has