Cached, Carried, or Crèched

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Abstract: We believe that "caching" a baby would have been too great a danger in human prehistory, and thus could not serve as the context for prelinguistic vocalization. Rather, infants were most likely carried at all times. Thus, the question arises of why the cry of an infant is such a loud vocalization.

Many years ago, Blumstein Jones (1972) did a comparative analysis of the physiology of mother-infant caregiving in mammals and distinguished between those that "cached" their infants, such as seals and ungulates, and those that carried them, such as primates (Jones 1972). He then looked at the physiological characteristics of the relationship between human infants and their caregivers and came to the conclusion that human infants were designed to be "carried" rather than "cached." Since that time, a consensus has developed (Barr et al. 2000) that intimate physical association between infants and their caregivers is an essential feature of human prehistory, an association that modern feeding arrangements contradict to the detriment of both infant and mother.

Devin Fark’s theory of language evolution challenges that consensus. It is based on the novel premise that hominid infants were less physically attached to their mothers than either their australopithecine ancestors or their contemporary hunter-gatherer descendants. Sometime between the adherence to the feed-as-you-go strategy of our ape ancestors and our switch to the center-point foraging strategy of our hominin ancestors was a time when infants were less physically intimate with their caregivers, and this period has left its traces in language development.

Despite some very attractive features of Fark’s arguments, we remain convinced that a human baby is not the sort of creature that can be long away from the physiological support and protection afforded by a human body. Nor do we think Pleistocene Africa was likely to have been the sort of place where putting a baby made much sense. Moreover, we doubt that putting a baby down would substantially increase foraging efficiency. Given that our ancestors were doing center-point foraging at that time, any food that was gathered had to be transported back to the home base. Therefore, at the point that carrying the baby would interfere most with foraging—when the fruits of being transported to the home base were more than the costs of mother care but to put down whatever she was carrying and pick up the infant.

Finally, given what we know about tool use in chimpanzees and early hominins. Falk’s idea that a primitive language would have evolved before a simple sling seems implausible. Wild chimpanzees use and sometimes carry tools as diverse as crushed leaves for soaking up water to drink, to simple stone hammers to open nuts (Beck 1975; 1980; Warren 1976). Basic Oldowan stone tools have been found in sites dating as old as 2.5 million years, associated with the fossils of Homo habilis (Klein 1999). These tools included rock tools that were carried to other sites, and hammerstones or rocks that were struck against other hard objects to make stone flakes. That tools were carried to other sites implies some form of carrying mechanism.

The target article by Falk addresses the important issue of the origin and evolution of language. In order to investigate what counted as the origin of the process, one should delimit the phenomenon of language and assume that language can be recognized and distinguished from other forms of communication. Language is more profound than speech and its realization may take different forms. Falk discusses the different communicative aspects of language, such as speech, gestures, and facial expressions including laughter, crying, and so on, without defining what she really means by language. Indeed, different people mean different things by the word "language": language can be thought of as the visual information conveyed in gestures and facial expressions, or as the tactile information exchanged by touch, or as the auditory information in speech (Gogate et al. 2000; Jonansean-L’Antone 1997; Melzoff & Kuhl 1994). With Liberman (1998) a narrow sense of language; defining language as constituted of a sensorimotor system and pure linguistic function has become available. Hauser et al. (2002) proposed two restricted conceptions of language: the faculty of language-broad sense (FLB), which includes sensorimotor system, conceptual-intentional system, and computational mechanism for recursion; and the faculty of language-