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Live Long and Prosper:
A Note on Attachment and Evolution

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Attachment theorists describe someone as 'attached' if they are able to use one or a few figures as a secure base from which to explore and as a haven of safety in retreat. These correspond to the ordinary, or non-emergency, and emergency functions of attachment.

It is obvious to anyone that attachment is a source of comfort in emergencies. However, from the beginning, both Bowlby and Ainsworth also recognized the important role attachment relationships play as a context supporting exploration, play, learning, and independence. From infancy to adulthood we are far more able to explore and exploit, and adapt ourselves to the environment in which we develop, if we are confident that someone who is available and powerful enough to help is "always there for me".

Bowlby consistently (e.g., 1956; 1973, ch. 20) emphasized its role in supporting independence. As he famously remarked,

> "Evidence is accumulating that human beings of all ages are happiest...when they are confident that *standing behind them* (emphasis added), there are one or more trusted persons who will come to their aid should difficulties arise." Bowlby 1973, p. 124

Moreover, the attachment independence linkage was a core insight underlying Mary Ainsworth's earliest work with William Blatz (e.g., 1966) and a cornerstone of her insights into the secure base concept.

Nonetheless, we still see attachment conceptualized in terms of proximity seeking and dependency in real or imagined emergencies, or as a system whose primary function is to extinguish negative affect. Conceptualizing attachment exclusively as an emergency system suggests that attachment is held in reserve most of the time, coming into play only in rare moments of threat or injury. This overlooks the rich range of positive emotions that occur in the context of attachment/secure base relationships, and suggests that positive emotion is merely the absence of negative emotions. The notion that emotions need to be "regulated" when they are aroused is rooted in Freud's view that emotions are toxic. In fact, the emotional side of life is a valuable source of information about the self and the environment. Moreover, it is less unruly than often imagined, and more coherent with other aspects of the self, when it is played out within a secure/trusting relationship. The idea that secure relationships help us own and embrace our emotions, not extinguish them, is one of the orphan insights of attachment theory.

At times, Bowlby clearly placed greater emphasis on attachment as an emergency behavior system than on support for exploration. This was especially true in discussing the evolutionary origins of attachment. Bowlby was committed to avoiding the kind of unscientific, even magical, foundations he saw in psychoanalysis. He saw in control systems theory a rigorous framework for understanding the apparent purposeful aspect of attachment behavior. However, explaining attachment behavior in terms of control systems would be just as magical as invoking libidinal drives, unless he could explain how human infants could have an attachment control system. That is, he needed to explain his explanation.

Turning to evolutionary theory to explain the existence of an attachment control system was an important element in the logic of Bowlby's theory. Certainly a wide range of vertebrates use proximity to adults for safety. But Bowlby's emphasis on predators owes more to classical evolutionary thinking than to modern perspectives. The evolutionary origins and functions of a behavior pattern are rarely so simple. Fleeing and proximity seeking are very old responses that evolved independently across the animal kingdom. They are much more likely to have played the role of preadaptations (traits that can be altered to serve new functions and thus make evolu-

tion in a particular direction possible) than to have been be a driving force in the evolution of primate and hominid secure base behavior, much less its primary function in modern humans.

Simply put, most of our predator problems wouldn't be materially diminished by running to Mommy. A large cat, for example, would have you long before you got there; and if you made it, it would take you and Mommy both. We are small, slow, unarmed, and our hide (such as it is) is very thin; cut it and all the juice runs out and we are dead. As for our intelligence, we fancy ourselves great problem solvers. However, the problems we handle best are the one's we manage to avoid. This is not to say that fleeing to an attachment figure has never worked. It is just that identifying the "evolutionary function" of any behavior is notoriously difficult, not least because it isn't static. A behavior's adaptive significance can change across evolutionary time, and at a given point a behavior like proximity seeking can serve multiple functions (Hay, 1980). Thus, we shouldn't too readily accept that predator avoidance is *the* adaptive function of infant attachment behavior. Although occasionally effective, in comparison to foresight, learning the habits of predators, group living, and diurnalism, running to Mommy in emergencies has probably played a pretty marginal role in human predator avoidance.

Granted that attachment is a powerful source of comfort in emergencies, it is equally (perhaps more) important to appreciate the adaptive significance of the non-emergency (ordinary), exploration -related functions of human attachment behavior. Accidents, fights among conspecifics, and bystander injuries are major sources of mortality among non-human primate young and, some would point out, among human offspring as well. An adult who is on guard and anticipates such problems can significantly reduce injuries and mortality. It is the adult's job to do so, however the job is significantly easier if the infant or child maintains an orientation toward her, signals its state and intentions, is sensitive to significant cues in the environment, and backs up her vigilance with signals over a distance, proximity seeking, and separation protest. It is just a little bit easier to supervise a baby or child that makes itself a bit more supervisable by favoring one or a few caregivers as a base from which to explore.

Effective supervision is a prerequisite for the second, more familiar, component of the secure base phenomenon - support for exploration and learning. One of the key components of any species' evolutionary endowment is its *life history strategy*, its solution to the problem of when to be born, how quickly to reach maturity, when to reproduce, and when to die. In the case of humans, our extraordinarily long period of immaturity is one of the most distinctive features of our evolutionary endowment. As both a precondition for, and an accommodation to, our complex brain and highly flexible behavior patterns, growing up slowly is very much at the center of growing up human. It is how we build a human nervous system and a flexible behavioral repertoire adapted to our experience. Any behavior that helps insure supervision and support, and helps us make the most of this long period of development and learning, is surely of great adaptive significance.

The distinction between the attachment behavioral system's ordinary and emergency functions has important implications for assessment. The Strange Situation, of course, emphasizes emergency behavior. There is good reason for this. A bit of stress increases the rate of diagnostically significant behaviors. Moreover, performance under stress is often a good test of a behavioral system's integration, robustness, and reliability. Nonetheless, the validity of the Strange Situation is rooted in its links to ordinary (largely non-emergency) secure base behavior in naturalistic settings (e.g., Ainsworth *et al*., 1978, Table 29, p. 242; Vaughn & Waters, 1990). Non-emergency behavior is also important in both the Attachment Q-set (Waters & Deane, 1987) and the Adult Attachment Interview (Main, Goldwyn, and Hesse, 2003). Indeed, the key observations underpinning Bowlby's attachment theory are Ainsworth's Uganda and Baltimore home observations, not Strange Situation classifications.

The secure base phenomenon is the core concept in Bowlby-Ainsworth attachment theory. Relations between ordinary and emergency functions of the secure base control system deserve high priority in attachment research. There are important unresolved issues here. Bowlby intended attachment theory to handle equally well the emergency and ordinary functions of secure base relationships. Both he and Ainsworth emphasized that safety alone is not enough - secure base relationships are critical to learning, adaptation, and development. Thus, our wish for loved ones is not simply that they live long. In past, present, and imagined worlds, our wish is that they "Live long ...and prosper". Attachment relationships are less about safety and emotion regulation than about becoming human and living a larger life than we could manage on our own.

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