

Book Review

The Emperor Still Has No Clothes. Review of the Book, *Basic Instinct: The Genesis of Behavior*

Basic Instinct: The Genesis of Behavior. M. Blumberg. (2005). New York: Thunder's Mouth Press.

Just when we thought that one sacred cow had finally been laid to rest here comes an important book warning us that we must maintain our vigilance lest the wool be pulled over our eyes yet again. The intellectual wars between comparative psychology and ethology that had been fought in the 1950s and 1960s were basically over the concept of "instinct." While many were satisfied that Robert Hinde's (1966) synthesis of the two fields put an end to the war, the battles have nevertheless persisted—first with sociobiology, which was an unveiled attempt to biologicize the social sciences (Wilson, 1975), and most recently with evolutionary psychology (EP) (Buss, 2005), a blatant nature solution to the age-old nature/nurture debate. The linkages between these closely related disciplines have recently been described by Plotkin (2005).

Instincts are once more in vogue says Blumberg. Indeed, as he reminds us, we have never really strayed that far from the idea of instinct (the many meanings of which include: innate, present at birth, predetermined, programmed by the genes, etc.) since the days of James and McDougall. He mirrors the earlier comment by Boakes (1984), that "in the first twenty years of the [twentieth] century, four hundred authors of books or articles had proposed nearly six thousand classes of instinct encompassing over fourteen thousand individual cases" (p. 216).

The book under review here is a very readable and carefully argued account of the failures of empty nativistic explanations of behavioral origins, explanations which fail to take development seriously, or even into account.

This is not the first, but only the most recent argument against nativism and biological (i.e., genetic) reductionistic accounts of behavioral origins. Blumberg's original contribution to this ongoing discussion is his presentation of several examples of painstaking research showing that developmental, that is, experiential and epigenetic, factors can always be found to underlie seemingly instinctive or innate behaviors. Herein lies the significance of his attributing current nativistic thinking to "more than a touch of intellectual laziness" (p. 203).

Blumberg, at the University of Iowa, writes in the tradition of Schneirla, Lehrman, Gottlieb, and others of the epigenetic and developmental systems theory "schools" (e.g., Oyama, Griffiths, & Gray, 2001).

Blumberg reminds us that Lorenz once famously said that most birds scratch their heads with the same precise movements and that he could not understand this as being other than the result of inborn, innate, instinctive factors. About this Blumberg opines, "We must not, however, confuse a failure of imagination with sound judgement" (p. 84). Of course one major goal of psychology is to understand the origins of behavior. We have learned that simplistic answers do not work, that merely applying labels (it is an instinct; there is a gene for schizophrenia) is no substitute for a full analysis, for the search for non-obvious experiential developmental precursors of behavior. This has turned out not to be particularly easy to accomplish, but "We are at a point in the science of human development where we must move on to the more arduous task of understanding the integration of biological and contextual influences in terms of the developmental system of which they are a dynamic part" (Lerner, 2004, p. 20).

I often caution my students that in psychology things are not always as they appear (e.g., Clever Hans). While it may seem that innate factors may be operating to regulate some behavior, such accounts have *always* yielded to experiential analyses following careful, and often lengthy, and yes arduous, empirical investigation. An important

Received 27 October 2005; Accepted 30 October 2005
Published online in Wiley InterScience
(www.interscience.wiley.com). DOI 10.1002/dev.20154

© 2006 Wiley Periodicals, Inc.

part of this book is Blumberg's descriptions of examples which reveal the results of such searches for these epigenetic factors. These include (1) the careful and painstaking research of Gilbert Gottlieb into the prenatal auditory underpinnings of duckling imprinting behavior. Gottlieb developed techniques to devocalize unhatched ducklings thereby showing that self-auditory stimulation, and that from unhatched nest mates, provided experiences which orient ducklings to their mothers. Similarly, (2) extensive research by Jack Hailman and his colleagues revealed experiential precursors of parental beak pecking and food begging by gulls, a behavior which in the 1960s was understood to be instinctive. As Blumberg says, "Simply put, chicks don't need no education. Or do they?" (p. 86). Hailman's work showed that for successful beak pecking "a chick requires experience to steady its stance, perfect its aim, and recognize its parent" (p. 89). But while Hailman pushed his work back to hatching, we now know that behavior begins even before, in the embryo (Kuo, 1967). Another example is that of (3) Meredith West and Andrew King's findings that cowbirds do not instinctively recognize appropriate mates even having been hatched in and weaned from the nests of foster species. Rather, a lengthy series of experiments showed cowbird species recognition to be the result of experiential factors, including the necessity of learning their species typical songs, an important component of species recognition.

One cannot fail to be impressed by the creativity of these scientists and their dogged pursuit of the true developmental precursors of the behaviors of their interest. Prior to their work each of these behaviors had been attributed to nativistic explanations. Of course, we can point to many behaviors that have not been so analyzed although that does not mean they cannot be. There are so many animal species and so many behaviors and only so many scientists to study them. Thus, in discussing why we know so little about herding behaviors in some dogs in which it appears to be inborn, Blumberg reminds us that this behavior has never been the subject of serious empirical investigation.

A favorite critical target of Blumberg in this book is EP, an approach which speaks of universal human nature driven by instincts we inherited from Pleistocene ancestors. EP suggests that some common human phobias, for example fear of snakes, result from evolutionary pressures early mammals faced in the presence of dinosaurs. Why, then, asks Blumberg, do we not develop

turtle phobias, also dinosaur ancestors, or bear phobias, another ancestral mammalian predator. Blumberg answers as follows: "Every time that we have closely examined their claims, we have found faulty experiments, far-fetched interpretations, or both. In short, nativists and evolutionary psychologists have draped themselves in the blanket of science, but when all is said and done, they are merely telling bedtime stories for adults" (p. 205).

This is an easy book to read, written in an engaging and non-technical style. It is, thus, suitable for the layperson and well documented enough to be of more than casual interest to the professional reader. Blumberg's own conclusion to the book is a fitting way to close my review: "Armed with a recalibrated notion of inheritance and an expanded appreciation of development, the true nature of instinctive behavior reveals itself" (p. 224)—experience and development matter!

REFERENCES

- Boakes, R. (1984). *From Darwinism to behaviorism*. Cambridge, UK: Cambridge University Press.
- Buss, D. M. (2005). *The handbook of evolutionary psychology*. Hoboken, NJ: John Wiley.
- Hinde, R. (1966). *Animal behaviour: A synthesis of ethology and comparative psychology*. New York: McGraw Hill.
- Kuo, Z.-Y. (1967). *The dynamics of behavior development*. New York: Random House.
- Lerner, R. M. (2004). Genes and the promotion of positive human development: Hereditarian versus developmental systems perspectives. In C. G. Coll, E. L. Bearer, & R. M. Lerner (Eds.), *Nature and nurture: The complex interplay of genetic and environmental influences on human behavior and development* (pp. 1–33). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Oyama, S., Griffiths, P. E., & Gray, R. D. (Eds.). (2001). *Cycles of contingency: Developmental systems & evolution*. Cambridge, MA: MIT Press.
- Plotkin, H. (2005). *Evolutionary thought in psychology: A brief history*. Malden, MA: Blackwell.
- Wilson, E. O. (1975). *On sociobiology*. Cambridge, MA: Harvard University Press.

Gary Greenberg

Wichita State University

Wichita, Kansas

E-mail: gary.greenberg@wichita.edu