

REVIEW

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Lerner's important book is divided into two parts, each of which deals with a significant issue. The first part presents a critique of genetic determinism espoused by contemporary ethology and sociobiology; the second part is a discussion of "developmental contextualism," Lerner's alternative to genetic determinism. Both parts of this book are also controversial: the first because of its treatment of Konrad Lorenz; the second because of the emotional and passionate attachment many still have to genetic determinism. Some have argued that Lerner's characterization of modern ethology and sociobiology is off the mark and outdated; this is, in fact, the case with several of the reviews in this special issue (Kaye, Lamb, Siegel). However, Lerner's characterization still forms the basis of much thinking in modern ethology and sociobiology, particularly in its new guise of "Evolutionary Psychology" (Caporael & Brewer, 1991; DeKay & Buss, 1992).

The controversy in the first part of the book has to do with the political implications of genetic determinism, which is illustrated by Lorenz's intellectual participation in the Nazi's "final solution." In a paper written in 1940, Lorenz argued for the genetic basis of human behavior and the weakening and subsequent degeneracy that would result as a consequence of interracial breeding; some suggest that that paper presents the argument that "only the state, by controlled breeding, can stop the decline towards degeneracy" (Allen, 1977, p. 82). We are all familiar with the consequences of this point of view. No doubt some would argue that Lorenz's Nazi past is of little consequence to science. Indeed, a rather warm, grandfatherly picture is usually painted of him. I do not agree with this picture; nor does Lerner. It is not only not improper, it is imperative that science have a social conscience.

This aspect of the book was controversial even before it was published, Lerner having been told by publishing officials that it was "too hot to handle" (personal communication). Lerner has been accused of shoddy scholarship because he had not read Lorenz in the original but had,

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rather, depended on numerous secondary sources. The truth is, however, that even though Lerner does read German, because he thought his competency insufficient to deal with nuances, he compared multiple translations of Lorenz and had his colleagues who teach German review the adequacy of those translations by looking at what Lorenz said in German. He did not rely on secondary sources as has been alleged. It should be noted that the translations he relied on have never been seriously challenged. Indeed, when he had the opportunity to do so, Lorenz himself did not challenge the English translation of a passage from his infamous 1940 article (R. M. Lerner, personal communication, April, 1991).

As Lerner points out, ethologists, sociobiologists and evolutionary psychologists see behavior, even human behavior, as programmed by our genes. As we inherit our behavior through our genes, we have bad or aggressive genes, and thus, we are by our very natures a hostile and aggressive species. A somewhat grim and pessimistic outlook about life indeed! In other words, human nature is fixed by our genes and passed on from generation to generation in the same way that eye color is. Although geneticists have abandoned such simplistic ways of thinking about genetic influences, this "genetic essentialism" and its serious social implications still form the basis of much thinking about behavior (Dreyfuss & Nelkin, 1992). But, if not the genes, what then? The answer to this question is the subject of the second part of the book.

T. C. Schneirla was the most important theoretician in comparative psychology at the time of his death in 1968. Among other things he postulated that behavior develops as a matter of the various experiences we undergo throughout the course of our maturation. To change those experiences, then, is to change the resulting behavior. "Are cats rat killers or rat lovers?" asked Zing Yang Kuo, the great Chinese psychologist. The answer is that it depends. Kittens raised with rats out of sight of cats that kill and eat rats never eat rats themselves, *even when hungry*. Having never seen a rat eaten, it is simply not food for these cats. But, that's precisely the point, particularly with respect to human behavior. About this, Ashley Montagu (1962) has said that "The wonderful thing about a baby is its promise" (p. 17).

Lerner has developed this long line of thinking from J. R. Kantor's "interbehaviorism" and T. C. Schneirla's "approach/withdrawal theory" (Lazar, 1974) into a theoretical orientation he calls "developmental contextualism." It is an optimistic conception of human behavior because it puts the burden on experience, i.e., ontogeny and psychology, rather than on genes, i.e., phylogeny and biology. While we can never escape our genes, we can engineer our development, something Skinner never stopped believing. Since behavior develops in a context, changing that context changes the experiential possibilities, thus altering our behavioral repertoires. The significance of this approach to understanding behavior

is that it is heuristic and empirically testable, as Lerner's work has shown over the years; it is, as well, parsimonious. However inviting his approach appears to many, it, too, is controversial. I suspect that this is due to its apparent neglect of biology as an important influence on behavior. But biology is not left out of developmental contextualism; it is fused with psychology.

The controversies generated by this book stem from the passion with which adherents approach genetic determinism and its major heroes. This passion is reflective of the dominant biological perspective in the psychological sciences. If it is not biology, the reasoning goes, somehow it cannot be real. But, as did Kantor and Schneirla before him, Lerner has shown that it is possible (and even desirable) to develop a uniquely psychological way of thinking. This line of thought is based on the philosophy of integrative levels (Feibleman, 1954), which for psychology implies that behavior is an epigenetic phenomenon, an emergent process resulting from the fusion of two levels, biology and psychology. This orientation is preferred to that which substitutes mere biological labels for real explanations. In a sense, I am glad that Lerner's book has stirred the fires of controversy. In dealing with this particular subject matter (nature-nurture) this seems to be the most successful way to get the message across.

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