

# Evolutionary Psychiatry: A New Beginning

Anthony Stevens and John Price

New York: Routledge, 1996, 280 pp. US\$69.95 cloth. ISBN 0-415-13839-6. US\$18.95 paper. ISBN 0-415-13840-X. Routledge, 29 W. 35th St., New York, NY 10001-2299, USA.

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Historians of science will remember the 1990s as the Darwinian decade of the social and life sciences. Serious application of the theories of evolution by natural and sexual selection has met with empirical and theoretical success across the subdisciplines of psychology (see Buss, 1995), and in criminology, sociology, and law (e.g., Daly and Wilson, 1988), in anthropology (e.g., Hill and Hurtado, 1996), and in various areas of medicine (see Nesse and Williams, 1994).

A similar explosion of evolutionary revisionism has challenged the foundation of psychiatry in this decade. In 1994, a special issue of the journal *Ethology and Sociobiology* was devoted to integrating psychiatry with modern Darwinian thinking. This issue included evolutionarily informed analyses of anxiety disorders, schizophrenia, and substance abuse. A Darwinian perspective also has been successfully applied to a range of affective disorders, including major depression and bipolar disorder (e.g., Nesse and Williams, 1994), and to several personality disorders, notably antisocial personality disorder (e.g., Seto et al., 1996).

The thesis of *Evolutionary Psychiatry* is that psychiatric "disorders" represent the output of evolved psychological mechanisms that contributed to relative reproductive success for ancestral humans under ancestral environmental and ecological conditions. According to the authors, many of the psychological phenomena that we today classify as psychiatric disorders may have been adaptive in the human ancestral past. The authors further argue that these same "disorders" may continue to be adaptive and, therefore, that psychiatrists should not necessarily attempt to "treat" these "disorders" without carefully considering the function each may have evolved to serve.

Depression, for example, may represent an evolved strategy for effective submission following loss in status competition. If a colleague is promoted over oneself, the symptoms

of depression—loss of energy and pessimistic self-reflection—may prevent one from expending limited psychological and physiological resources in a status competition that has already been lost. Instead, the task now is to reflect on how one can make oneself a more promising competitor in the future.

Against the background of standard psychiatric classification, the authors provide evolutionary arguments for personality, obsessional, anxiety, and eating disorders, and for schizophrenia, homosexuality, and sadomasochism. For each, the authors ask and attempt to answer two key questions: (1) How might this "disorder" have contributed to the relative reproductive success of ancestral humans?; and (2) How might this "disorder" continue to be adaptive?

The book is organized into six sections. In the first section, the authors provide an introduction to evolutionary psychiatry. This section includes an overview of the history of psychiatry, with particular reference to the stagnation of a field that has until recently ignored the insights of modern evolutionary biology. The authors conclude Part I by presenting their argument that many psychiatric disorders are disorders of attachment and rank. Disorders of attachment and disorders of rank are caused by failures to solve the adaptive problems of establishing and maintaining interpersonal relationships and relative social status, respectively.

Part II of the book covers disorders of attachment and rank, which include affective, personality, obsessional, anxiety, and eating disorders. Part III covers "borderline" states and disorders, which lie between nonpsychotic and psychotic states. Regrettably little is offered by way of an evolutionary psychiatric perspective on borderline states and disorders.

Part IV covers "spacing" disorders. Included within this broad class are avoidant, paranoid, and schizoid personality disorders, as well as schizophrenia. People with spacing disorders "have difficulties in forming and maintaining personal relationships and in functioning appropriately as members of a social group. In addition, they tend to deal with these social difficulties by adopting a strategy of withdrawal" (p. 131).

Part V, "Reproductive Disorders," includes chapters offering evolutionary psychiatric perspectives on homosexuality and sadomasochism. The sixth and concluding section of the book includes a chapter on sleep and dreams, in which

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the authors provide a fascinating summary of the parallels between dreams and psychotic states. A chapter on classification summarizes the revisions to current psychiatric classification systems suggested by adopting the authors' evolutionary perspective. In the final two chapters, the authors offer suggestions for treatment of psychiatric "disorders." The book concludes with an epistemological defense of applying evolutionary principles to psychiatry.

### Shortcomings

The authors rely without justification on Carl Jung's theories of personality and psychopathology. The recourse to Jungian theories frequently amounts to nominally replacing a well-established and well-defined evolutionary psychological concept with a less well-defined, apparently parallel Jungian concept. Instead of using the terms "psychological adaptation" or "evolved psychological mechanism," for example, the authors substitute "archetypal propensity," without differentiating the latter concept from the former concepts. Throughout the book, the authors fail to justify their apparent conviction that an evolutionary perspective necessitates a Jungian perspective.

A second problem is an empirically and theoretically unjustified appeal to evolution by group selection. The authors argue that many psychiatric "disorders" can best be understood as adaptations that evolved for the good of the social groups in which ancestral humans lived. Depression following loss in status competition, for example, ensures that harmony is restored within the group (pp. 69-70). In countering the well-known shortcomings of group selection, no reference is made to Williams's (1966) masterpiece, which decisively refuted "for the good of the group" arguments applied to human adaptation.

A third problem is a persistent confusion of the *process* of selection by virtue of differences in design with the *product* of this selective process—adaptation. Modern human evolutionary science holds that adaptations exist in their present form because they contributed to the relative reproductive success of ancestral humans. These adaptations may or may not currently contribute to an individual's relative reproductive success. An evolved mechanism is adapted, but not necessarily currently adaptive. Documenting current adaptiveness reveals nothing about the selective history of an evolved mechanism. At most, current adaptiveness provides information about selection pressures operating at a single moment in time within a single generation and given a set of limiting ecological conditions. Throughout the book, the authors interchange "adapted" and "adaptive," apparently without regard for the very different arguments implied. On the final page of the book, the authors distance themselves from sociobiology (and, simultaneously, link themselves to evolutionary psychology) by disavowing the assumption that evolved mechanisms motivate behavior that is currently adaptive. This closing statement is inconsistent

with the apparent confusion on this issue that characterizes the rest of the book.

As psychologists, we were keenly aware of the authors' failure to incorporate or even to cite volumes of relevant psychological theory and empirical work. This omission is egregious in the discussions of personality, self-esteem, ingroup/outgroup differentiation, and attachment processes. A related problem is an unjustified reliance on classical psychoanalytic theories of the etiology and maintenance of psychopathology. In particular, the authors repeatedly invoke "bad parenting" as a significant cause of psychiatric disorders, revealing an unfamiliarity with a staggeringly large literature on the failure of parental treatment to account for anything beyond a trivial amount of the variance in psychopathology (see Rowe, 1994).

A final problem is an untethered use of core concepts in modern evolutionary science. The concept "adaptation," for example, has a precise definition (see Williams, 1966). The authors, however, use "adaptation" as apparently synonymous with, for example, creativity, adjustment to current life stresses, enhancement of life, and psychological well-being. Readers unfamiliar with modern evolutionary approaches will be misled by the liberal usage of precisely defined foundational concepts.

### Contributions

Although we found much to disagree with, *Evolutionary Psychiatry* has much to recommend it. First, we commend the authors on their commitment to infuse psychiatry with Darwinian thinking. Stevens and Price did not have an easy task before them; they are among a small but burgeoning group of evolutionary psychiatrists.

Strong points of the book include an emphasis on the importance of kinship and group living for ancestral and modern humans. The authors also do an excellent job of highlighting the contributions and influence of John Bowlby, whose theory of attachment has generated considerable empirical work by evolutionary psychologists, particularly in the last decade.

One of the most interesting discussions in the book identifies parallels between the structure and content of dreams and of psychotic states. Stylistically, the book is easy to read, and the organizational structure is sensible. The book is broken down into short, relatively self-contained sections that facilitate picking it up and putting it down as time permits. The target audience appears to be the interested and intelligent layperson. In summary, although we found much with which to argue, *Evolutionary Psychiatry* is thought-provoking and certainly worth reading for anyone interested in psychiatry, evolution, or the emerging field of evolutionary psychiatry.

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