

Revitalising psychiatry

Book review

Stevens, A and Price, J (1996) **Evolutionary psychiatry**. London: Routledge.
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The central tenet of this book is that psychiatry will be revitalised, and will assume its place within a new science of humanity, by application of the understanding that there is, importantly, an evolved component to expressed human nature. This stance, which might once have attracted strong opprobrium from the psychiatric community for its acknowledgement of biology, is now comfortably situated within the increasingly established domain of evolutionary psychology and is, more immediately, an explicit extension of the ideas of Randolph Nesse and George Williams. Nesse and Williams, the latter a distinguished evolutionist in his own right, have established a field of enquiry they call Darwinian medicine (see **Evolution and healing: The new science of Darwinian medicine**, Orion Press, 1996) and which is an attempt to find evolutionary explanations for vulnerabilities to disease in order to better direct treatment. If the human body is selected to perform efficiently within a particular environment, then we might expect problems to manifest themselves once the environment is sufficiently altered. Since the basic features of the human body and, more controversially, the human mind are held to reflect selection pressures operating during the paleolithic, it is not surprising that the extraordinary changes in human lifestyle contingent on the emergence of agriculture ten thousand years ago have had far-reaching consequences for us. We have a physiological craving for sugar, fat and salt, for example, because these are very valuable but scarce components of the standard hunter-gatherer diet. The undesirable corollary, in times of plenty, is the epidemic of obesity with all its attendant health problems, that plagues the developed world and fuels a colossal fast-food industry. Ironically, even the generally improved health of most modern populations reveals the constraints of our past. The degenerative muscle disease, Huntington's Chorea, is due to the action of a late expressing gene. It doesn't manifest itself prior to the age of forty, by which time its original carriers would have been post-reproductive if not dead. Since it could therefore not have been selected against by the improved reproductive success of non-carriers, it survives to haunt us in these times of greatly increased longevity.

It is easy to see how this line of reasoning and analysis can be extended from the body

to the mind, particularly in light of the increasingly detailed assessments of gene/environment interaction of such phenomena as autism and schizophrenia. In essence, the approach taken by Stevens and Price is to review the standard categories of psychiatric classification (disorders of affect and personality, obsession and anxiety, borderline states, schizophrenia, reproductive disorders) and to argue either that the psychiatric symptoms are selected strategies that are now being applied in an inappropriate environment or, alternatively, that there is active selection for the maintenance of some conditions, such as depression and schizophrenia because these, despite their debilitating effects, promote survival and reproductive success.

The book itself is presented as academic text, presumably for undergraduates, given the presentation of key words and concepts in bold, with a standard format wherein the disorder is described, its aetiology presented and an evolutionary perspective offered. Although it aligns itself with the new evolutionary psychology it is, in fact, more directly rooted in an earlier ethological past, rather than the more recent sociobiological one. This distinction is important, reflecting as it does the authors' own predilections for a Jungian framework. Jungian concepts, such as archetypes and the idea of a collective unconsciousness, are more readily updated and fitted to an ethological model, pioneered in psychiatry by John Bowlby in the 1950s, that stresses action patterns and behavioural types than they are to the more quantitative sociobiological model that stresses individual differences in reproductive value. Sadly, this alignment also promotes the "just-so" stories that bedevilled earlier attempts, such as those of Desmond Morris, to flesh out the functional significance of evolved attributes. The value of modern evolutionary psychology lies in its attempt to provide testable hypotheses, where the tests depend on assessments of survival or reproductive success. It has, for instance, been argued that human facial attractiveness has its basis in the degree of midline symmetry and that this is itself an indicator of underlying physiological vigour. People, therefore, who find symmetrical faces attractive will attach themselves to healthy partners who are more likely to produce surviving offspring. If so, the preferences for symmetrical faces should evolve and should have the specified reproductive consequences. This is a hypothesis that can be – and has been – tested. By contrast, the argument in this book that the schizoid genotype is the product of selection for a charismatic leader to hold a group together in the wake of social fission is facile, untestable, and based on a misguided resurrection of group selection. While it may be true that individuals who manifest schizotypal characteristics in the weak form are attractive to others, as is argued to be the case for cult leaders such as Jim Jones, there seems to be no good evidence to insist that this is anything more than a response to exaggerated forms of human behaviour that are prized, such as risk-taking or decisiveness, and does not constitute selection for a schizoid personality.

Overall, while I value an evolutionary perspective on human sociality and do think that psychiatry can be enlivened by this approach, I do not believe that this is the book to do it. It is an overview aimed at the novitiate and although it may be useful for a psychologist to consider the categories of the DSM-IV from an evolutionary perspective, the proffered analysis is an odd amalgam of ideas that does not adequately represent current thinking. What is needed is a more cogently argued and deeply considered analysis that pays more attention to the complexity and nuances of the interaction of gene and environment.