In recent years, evolutionary psychology has gained increasing attention in both the popular and the technical press. This book is an attempt to provide an up-to-date account of its research and theory for advanced undergraduate students, graduate students, and professionals and to integrate the system into psychology.

The book is divided into six parts and 24 chapters, each with its own author(s). Part I provides the biology of the system; Part II, the bridge between evolutionary theory and evolutionary psychology; Part III, the evolution of mental mechanisms; Part IV, the evolution of sex differences; Part V, the evolution of prosocial behavior; Part VI, the evolution of antisocial behavior and psychopathology; and Part VII, a single chapter, on the evolution of religion. Despite the diversity of topics and authors, the book seems to be tightly edited and coheres reasonably well.

The unifying assumption is that behaviors are selected by reproductive fitness: Those behaviors that facilitate survival lead to genetic reproduction, whereas those that do not become extinct. Although there are differences from author to author regarding the issue of the extent to which biological traits interact with environmental conditions, the trend has been, at least in this book, for such interactions to gain more attention and for information-processing models to retreat somewhat from prominence.

In the first chapter, an overview of the history of evolutionary psychology, Salmon and Crawford present six assumptions that are common to the field of evolutionary psychology. It would be of considerable interest to see the protopostulates and metapostulates that underly these assumptions (Kantor, 1959; Smith, 2001).

In reviewing studies of physical attractiveness, Scheyd, Garver-Apgar, and Gangstad find that many measurements do not come out as expected, and sometimes even reveal the opposite of expected findings. This results in a good deal of speculative theorizing to find explanations for how the behaviors serve reproductive success. Krebs shows how difficult it is to find a genetic basis for prosocial behavior. Complex motives of fairness, giving, sacrifice, and others do not readily lend themselves to genetic explanations. This problem he circumvents by assuming that “individuals may inherit dispositions that, though genetically selfish in the environments in which they were selected, may misfire in modern environments, produce
unselfish by-products, and give rise to maladaptive, genetically unselfish behaviors” (pp. 308–309). He concludes that “in conducive conditions people are disposed to suffer considerable pain, and even death, in order to help those for whom they care and with whom they empathize” (p. 309); and it may not matter if this somehow turns out to have a selfish component, for the “nobleness of human nature” (p. 309) would be no less intact. But Frank argues for subtle or long-range benefits to the person whose moral sentiments lead to altruistic acts.

Gintis, Bowles, Boyd, and Fehr turn away from long-held assumptions that social behavior is due to either kin selection, in which prosocial behavior benefits close kin despite disadvantages to the giver, or to reciprocal altruism, in which return favors are expected. The authors hold that attention should be paid to cultural evolution as well as to genetic evolution and to conflict and group structures. Johnson, Price, and Takezawa review theories of individual-level adaptation, which has been pushed to the background, versus group selection. They find that the individual-level merits renewed attention: Studies show that people “behave as reciprocators and engage in positive assortment” (p. 348). This is predicted by individual level theories “but not by theories of biological and cultural group selection” (p. 348).

Daly and Wilson defend against critics the finding that the “Cinderella Effect” is valid and universal: Around the world, the rate of stepchild abuse and homicide is far higher than that of genetic children. This, of course, argues for the genetic parents’ bias toward preserving their own genes and eliminating those of the competition. But why, then, do the vast majority of step-parents not abuse their stepchildren? And why would anyone want to adopt children who are not genetically related?

Troisi attempts to analyze prejudices in conflicts between groups by reference to prehistoric human experiences and evolved traits. He does not address one of the most fundamental arguments that have been leveled against this aspect of evolutionary psychology—that it requires reference to prehistoric social behaviors, despite the fact that most prehistoric behavior is unknown and unknowable, whether through surviving artifacts and traces, the behaviors of historically attested hunter-gatherers, or comparative primate behavior.

This book seems to be making good progress toward fulfilling one of its goals, that of integrating itself into psychology. It represents some of the best research in the field of evolutionary psychology. However, the confusion of constructs with events is endemic throughout the book. For example, Salmon and Crawford refer to the study of “the psychological mechanisms that make up the human mind” (p. 18). For Barrett “evolutionary processes shape brain mechanisms and brain mechanisms shape behavior” (p. 173). He proposes inputs and outputs and various mechanisms. The authors seem not to recognize that both mechanisms and mind are constructs, not events, and that the authors are imposing the constructs on the events. The information-processing construct and a psychological rather than biological brain are also used in this way by a number of authors (for a critique, see Bennett & Hacker, 2001; Kantor, 1947; Noë, 2009; Observer, 1969; and Smith, 1993). By starting with constructs, they end with those same constructs (Fryling & Hayes, 2009; Kantor, 1957, 1978; Smith, 2007). Nevertheless, evolutionary psychology seems to have moved somewhat away from the
mechanistic characteristics of its beginnings. For those who want an up-to-date account of the system, this is a good place to start.

References


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