Introduction

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According to phylogenetic law, the psychic structure must, like the anatomical, show traces of the earlier stages of evolution it has passed through. (Jung, 1966, p. 97)

What emergent path has the psyche taken in the course of human evolution? Attempting to address such a vast, speculative, and controversial topic is for any group of researchers a daunting task. Indeed, many social scientists would balk at the very use of the word “psyche,” viewing it as an anachronistic throwback to a prescientific age. While we ourselves are firmly committed to the ultimate value of scientific analysis, we have chosen to retain “psyche” as an objective locus of human psychological evolution. This choice is motivated by the shared belief that the human person, even after valid reductive analysis, remains greater than the sum of his or her parts. The decision to retain this term reflects our strong belief in the uniqueness of human psychic life, despite our sharing of an evolutionary past and present with infrahuman species.

Psyche, as we use it, refers not only to the psychological but also to the social and biological realms. Indeed, psyche (soul and mind), like soma (body), has evolved in a social context and is grounded in biology. Despite its rootedness in biology, the difficulties in tracing psychic evolution are manifold. Whereas biological evolution has left clear structural markers, identifiable through an examination of skeletal remains, psychic evolution can be inferred only from psychological and cultural evidence already partially contaminated by human-kind’s establishment of a world of human meaning. The difficulty of tracing psychic evolution is compounded by the accumulation of thousands of years of human history and cultural development that both obscure as well as elucidate
the evolutionary pathways. The authors contributing to this current volume walk
the fine line that separates the contiguous and interpenetrating worlds of human
evolution and development. The success of their creative forays into the realm
of psychic evolution will be left to the judgment of the individual reader.

In Chapter 1, Buss maintains that psychological science is currently in con-
ceptual disarray, characterized by unconnected mini-theories and isolated em-
pirical findings. He addresses the need for a paradigm shift in psychology. Buss
postulates that evolutionary psychology provides the integrative conceptual tools for
emerging from this fragmented state. He outlines the fundamental premises of
evolutionary psychology, illustrates the application of evolutionary psychology
to domains such as reasoning, social exchange, language, aggression, sex, and
status, discusses jealousy in detail, and then considers the implications of evolu-
tionary theory for psychology. Buss, the author of a pioneering text (Buss,
1998) in this field, concludes by focusing on the future of evolutionary psy-
chology as our field matures into the twenty-first century.

Chapter 2, by Campbell, Simpson, and Orina, explores how different, evolu-
tionary-based theories address patterns of mating in humans. They review and
evaluate Trivers's (1972) Parental Investment and Sexual Selection Theory, fo-
cusing on important and often overlooked nuances in his theory. Then the au-
thors review and critique Buss and Schmitt's (1993) Sexual Strategies Theory,
which attempts to explain variation in mating strategies between and within
women and men. Subsequently, they review theory and research from a "fe-
male-centered" perspective. For instance, they examine recent models of mating
proposed by Hrdy (1997), Gowaty (1992a, 1992b), and Waage (1997). Then the
authors present Gangestad and Simpson's (1997) Strategic Pluralism Theory,
which melds ideas from good-provider and good-genes models of sexual selec-
tion. Lastly, the Strategic Pluralism Theory, which attempts to explain why so
much within-sex variation exists in human mating, is evaluated, and suggestions
for future research and theory development are proposed.

In Chapter 3, Graziano and Tobin discuss the challenge of integrating a per-
son's individual history with evolutionary approaches to psychology, giving spe-
cial attention to social narratives. The authors set out to answer these questions:
How can we reconcile historical accounts that assign a high priority to the
powerful role of individual experience with evolutionary accounts of psycho-
logical structure that give meaning to persons and events, presumably transcen-
ding time and place? How do history and individual experience constrain evolved
psychological structure, and vice versa? Why do some characters and narratives
from antiquity still speak to us? The authors argue that for persons of all ages,
meaning must be forged on the anvil of existing psychological structures and
life experiences. They maintain that the meaning would not be filtered passively
through existing structure but created in concert with existing structure. Further,
they claim that from a developmental perspective, an individual's life experi-
ences can even shape and alter psychological structure. The authors conclude
with a discussion of narratives and stories as tools for uncovering evolved psy-
chological structures.

Chapter 4, by Skowronski and Sedikides, argues that the human capacity to
construct a self is an evolutionary adaptation. Specifically, they suggest that the
symbolic self is a trait that was selected and distributed in the human population
because of its considerable adaptive value. Indeed, they propose that the sym-
bolic self evolved from a more primitive form of self-concept that has close
analogues in species near to humans on the evolutionary tree. Citing evidence
that the higher primates possess a kind of objective self-awareness, they argue
that objective self-awareness was present in the early ancestors of humans but
was altered and amplified in response to evolutionary pressures: (1) the exigencies
of food procurement (especially hunting) and (2) new social pressures rel-
ated to the rise of large, stable social groups. Central to this perspective is the
idea that the symbolic self is formed, in part, by an internalization of the group's
perception of the individual.

In Chapter 5, Smith and Ward posit that human creativity is a uniquely adap-
tive trait that continues to serve us in our rapidly changing environments. The
authors describe evidence of cognitive and motivational components of creativ-
ity that can be seen throughout evolution. A recently evolved cognitive mech-
anism of central importance in creative thought is environmental suppression,
which is the ability to suppress one's processing of the immediate environment
free up cognitive resources necessary for conceptualization. Neoteny, a pro-
longed period of immaturity, is described as another critical contributor to cre-
ativity. Smith and Ward conclude their chapter by speculating that in a
metaphoric sense, creativity recapitulates both ontogeny and phylogeny, re-
creating similar patterns within the thought process as are found developmentally
and evolutionarily.

Chapter 6, by Pierce, examines the concept of insight from a cognitive psych-
ologist's perspective and provides a possible evolutionary account for the
phenomenon. He begins with the seminal studies of intelligent chimpanzee be-
havior by Wolfgang Köhler (1925) and then provides possible examples of in-
sightful behavior in other species. Selective advantages of insight are discussed,
particularly in regard to insight learning as an adaptive alternative to purely
random or "blind" trial-and-error learning. Distinctions are drawn between in-
sight and other forms of intelligent behavior. Then, using the work of Stephen
Fiore and Jonathan Schooler (1998), Pierce discusses a possible neuropsychol-
ogical basis for insight. In particular, he discusses the parallels pointed out by
Fiore and Schooler (1998) between insight problem-solving characteristics and
cognitive functioning in the right hemisphere of the brain. Pierce concludes that
those processes involved in insight problem solving may have evolved in con-
junction with specialized functions of the brain's right hemisphere.

Chapter 7, by Vaid, explores the nature and functional significance of humor
in relationship to its presumed survival value. In a review of the extant literature,
she presents and critiques four distinct hypotheses regarding the adaptive sig-
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Significance of humor, suggesting possible avenues for empirical testing. As a disabling mechanism, humor appears to display a survival value by interfering with habitual, schema-based reasoning that, if unmodified, might lead to disastrous results. Viewed as a source of social stimulation, humor can be seen as providing exposure to fitness-enhancing scenarios in a nonserious context, facilitating the attainment of invaluable survival skills. Humor is also thought to promote survival by enabling the individual to manipulate his or her status in a group, thereby ensuring access to resources necessary for reproductive success. Lastly, the development of language in general and humor specifically have been viewed as a vocal extension of physical grooming. By facilitating the release of endogenous opiates, both physical grooming and laughter promote social bonding necessary for survival in a dangerous environment. Vaid concludes by suggesting possible directions for empirical research, addressing whether humor possesses a different adaptive significance for males and females involved in the mate selection process.

In Chapter 8, Huston, Rosen, and Smith maintain that, although Descartes artificially separated psyche and soma, actually they are two aspects of the same, integrated whole. In fact, the evolution of the psyche (mind) parallels the evolution of the soma (body). Hence, it is postulated that the mind has an unconscious collective memory of its evolutionary past. In other words, the collective unconscious can be thought of as the evolutionary memory of humankind. Empirical cognitive studies indicate that while individuals do not consciously (explicitly) know what archetypal or ancient symbols mean, they do share an implicit, unconscious knowledge of their universal meanings. A possible mechanism is discussed, and it is proposed that this type of evolutionary memory is innate.

Chapter 9, by Cooke, presents a biopoetics that purports to link the purposes of art with the genetic imperatives of evolution. Specifically, Cooke proposes that one can use the tenets of natural selection to account for differential interest, namely, the uneven attention we give to diverse facets of our environment. With limited time, mental capacity, energy, and focus, we necessarily preselect foci for attention, but this preselection follows contours closely related to the survival needs of humans in the original environment of evolutionary adaptedness. Taking into account the regularity of phobic reactions to snakes both in humans and non-human primates close to us on the evolutionary chain, Cooke explores artistic expression connected with three largely snakeless realms as evidence for survival-oriented, differential interest: ancient Ireland, the age of nineteenth-century European decadence, and the twentieth-century genre of science fiction.

In Chapter 10, Luebbert explores the development of forgiveness from an evolutionary point of view, establishing evidence for “forgiveness” behaviors among non-human primates. He argues, as well, that the twin theories of kinship selection and reciprocal altruism, when viewed as a product of natural selection occurring within humankind’s original context of evolutionary adaptedness, help explain forgiveness behavior. A human capacity to forgive developed originally to cope with environmental pressures associated with food acquisition, mating, predation, and marauding bands. Cooperation among kin and non-kin alike ensured that one’s genes passed on to succeeding generations. Luebbert also suggests that as humankind moved beyond the original environment of evolutionary adaptedness, the internalization of literacy led to a more highly differentiated and interiorized personal identity and a lessening of the agonistic character of primary oral consciousness. An increased capacity for separating the knower from the known encouraged by literacy led, in part, to a guilt-based morality and, consequently, to new possibilities for forgiveness. So-called dialectical forgiveness could now be imagined and practiced. Likewise, an increasing capacity for abstraction laid the groundwork for the articulation of universal religious appeals for forgiveness. However, the author maintains that only from a contemporary perspective can we fully appreciate the survival value of forgiveness.

Chapter 11, by Huston, provides an introduction to Jung’s archetypal psychology. She also operationally defines archetypal dreams and explains how they are different from other kinds of dreams. In addition, Huston maintains that archetypal dreams are evolutionary in that they serve an adaptive purpose that has helped human beings to survive. Finally, the author discusses some of her own dreams as an aid to understanding and appreciating the value of archetypal dreams and their adaptive nature.

In Chapter 12, Price and Stevens take an evolutionary approach to psychiatric disorders, arguing that the genetic tendency underlying schizophrenia and affective disorders performs different, even opposite survival-enhancing functions. They portray both disorders as by-products of vital group processes, concerned with the multiplication and integrity of human groups during the course of evolution. According to their view, the capacity for mood change served as a primitive mechanism, enabling the individual to accept lesser sanctions protecting group homeostasis (i.e., the loss of status or prestige), thereby avoiding the ultimate sanction of group expulsion. In like manner, an evolutionary approach to schizophrenia suggests that as human social groups reached a certain size, a need for group splitting or colonization arose. Bearing the schizophrenic genotype, a successful leader would attract followers and persuade them to accept his or her unique beliefs, thus promoting an orderly process of group splitting that favored the evolution of the human species.

Chapter 13, by Stevens and Price, brings a new orientation to the treatment of disorders of the psyche. Initially, the authors outline the following position, which is the premise of their important new text (Stevens & Price, 1996): psychiatric disorders are an ancient adaptive response that for some contemporary reason has become maladaptive. Then they discuss how treatment ought to parallel this evolutionary view of mental conditions. Stevens and Price contend that the key factor in all treatment is to take the patient’s history beyond purely personal predicament and relate it to the story of humankind. They illustrate their perspective with a case history involving a depressed patient.

The chapters in this volume provide a diverse sampling of scientific and
theoretical approaches to understanding some of the most important markers connected with the evolution of the psyche. Markers from our evolutionary past can be discerned in our similarities to our infrahuman ancestors, in the structure of the human brain, and in contemporary capacities that, upon reflection, continue to serve purposes best understood in our original environment of evolutionary adaptedness. Indeed, evolutionary psychology can help chaste our acceptance of Western enlightenment ideas by reminding us that the legacy of our evolutionary past continues to shape our human responses and by serving as a new integrative paradigm for psychology in the twenty-first century.

REFERENCES


