

Origins of Psychopathology

*The Phylogenetic and Cultural
Basis of Mental Illness*

HORACIO FÁBREGA JR., M.D.

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En memoria de mi padre, Horacio Fábrega, con muchísimo respeto y cariño.

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Preface

THE TITLE OF THIS BOOK may suggest a focus on the circumstances and events that take place during a person's lifetime that predispose to or even cause mental illness or emotional problems. Its subject is actually quite different. The human species, not individuals, are its focus. Millions of years of human evolution, and not just the lifetime of a person, are its temporal compass. Moreover, this book does not address why mental illness arises in individuals, but whether or not problems of social and psychological behavior analogous to those of contemporary psychiatric interest could have possibly existed during earlier phases of human evolution. It can safely be assumed that if a book of this length is written to address the question of the phylogenetic history of psychiatric disturbances, then my position on the question is in the affirmative.

The book has two complementary aims. First, it represents an effort to better understand the nature of the clinical material that psychiatrists deal with. Second, it seeks to accomplish this by drawing on an anthropological understanding of human evolution. This should produce benefits in two camps. For clinicians, the result should be a deeper, more comprehensive understanding of mental illness, rendering their work with patients more fruitful. For biologists, the result should be a better understanding of a class of behavioral problems usually all but neglected in evolutionary biology, creating opportunities for new academic emphases in research in relevant subfields.

From a more personal point of view, the subject matter of this book fills in the gaps and attempts to answer some of the questions that have bothered me as a practicing psychiatrist over the years. Questions about the origins and interpretation of psychiatric disorders, construed in a broad cultural and evolutionary frame of reference, are simply not a part of the knowledge base that psychiatrists are exposed to. Clinical psychiatry is presented to trainees as though the behavior problems that it deals with conform to clearly defined and easily

recognized patterns. A behavior problem, and a psychiatric disorder, in particular, can be thought of as involving changes in overt actions and behaviors and changes in physiological functions (for example, energy, appetite, sleep, sexuality). In this sense, the problem can be said to have a tangible, objective existence and can be corroborated. It is this seeming externality that leads to the mistaken view that psychiatric disorders have a common identity across cultures and can be easily spotted. However, the alleged distinctiveness of these behavior problems soon raises a number of questions. A psychiatrist in training comes to learn that problems of behavior are not always brought to the clinic because they are not judged (either by the person showing them or by significant others) to be serious enough to require evaluation or treatment. Psychiatrists come to appreciate that behavior problems, including psychiatric disorders listed in the manual of diagnosis, differ in their manifestations and in their interpretation by laypeople. In other words, the variety of behavior problems, what they consist of, and how they are interpreted—how they affect the lives of persons exhibiting them and others—is much larger than what trainees are taught. Of those problems of behavior that are brought to the clinic, by far the largest proportion can be fitted into the descriptions of psychiatric disorders as outlined in the statistical manual of diagnosis. However, the price of fitting a person's personal behavior problems in the straightjacket of a diagnosis is that the subtlety and meaning of those problems is denied, and, hence, they elude our attempts at understanding them.

Psychiatric education and the actual practice of psychiatry are also burdened by a number of theoretical questions about the character of psychopathology. Among the most basic are why psychopathologies arise in the first place, where they come from, and how they become visible as social "entities" in a community. Of course, the behavioral sciences have standard responses to these questions, and the social sciences have others that are at times quite critical of the psychiatric profession. But answering the questions I have posed regarding the fundamental bases or origins—hence the significance—of psychopathology in the human species really requires taking hold of evolutionary theory and applying it to the domain of psychiatric practice. Here, in other words, one is required to incorporate knowledge not only of psychiatry but also, more important, knowledge about anthropology in all its comprehensive reach. This facet of psychopathology, which involves its origins viewed across the expanse of evolution, is totally neglected in psychiatric education, theory, and practice, and that deficiency is precisely what is addressed in this book.

In contemporary evolutionary biology, chimpanzees are regarded as the earliest persisting relatives of members of *Homo sapiens*. The last common ancestor of members of the human species and chimpanzees is assumed to have lived around 5 million years ago. Scientists have based these inferences on ethologi-

cal analyses of social and psychological behavior, principles of evolutionary biology, and studies of molecular evolution. Hence, it is reasonable to assume that a tendency to show psychopathology, a universal possibility in *Homo sapiens*, arose some time during the line of evolution stretching from the last common ancestor to the emergence of modern humans. This is the orienting theme of this book and its intellectual terrain.

What is known about the normal and abnormal behavior of chimpanzees and the higher primates is the basic, foundational material that has to be reviewed and brought into the equation for explaining the origins of psychopathology in the line of human evolution. The anchoring point for an evolutionary study of origins is whether there is reason to believe that something like psychopathology is found in the higher apes, and, if so, how it is manifested. Following this point in evolution, the question of the origins of psychopathology requires us to consider the evolutionary trajectory of the hominids—that is, the changes that have transpired since the last common ancestor with respect to basic parameters of behavior such as social ecology, social organization, cognition, and culture. All of these issues can affect the character and meaning of behavior, and hence of psychopathology, in highly social groups like the higher apes, hominids, and especially humans. Explaining the origins of psychopathology entails clarifying what psychopathology consists of, how it can be understood from an evolutionary standpoint, and how it may have been configured and enacted in groups of hominids over the long process of evolution leading to *Homo sapiens*.

To deal with the question of the origins and significance of psychopathology in a satisfying way, I have reviewed and synthesized knowledge in paleoanthropology, archeology, social and behavioral ecology, human biology, evolutionary biology, comparative psychology, evolutionary psychology, cognitive science, cultural anthropology, and the behavioral sciences that bear on psychiatric problems. My purpose was to synthesize this material so as to relate phenomena pertaining to disturbances of social and psychological behavior glossed as psychopathology to the processes of human evolution.

The book is divided into three parts. The first six chapters address theoretical questions. Chapter 1 deals with general intellectual issues that are raised by simply contemplating the possibility that psychopathology has an evolutionary history. In other words, the problem is raised of crossing the animal-human divide by attributing something so human as psychopathology to animals. In addition, definitions of psychopathology that facilitate an evolutionary perspective with respect to its origins are reviewed. Chapter 2 looks at how researchers interested in human psychology, psychiatry in particular, have used evolutionary theory. These researchers generally refrain from entering into the behavioral space of hominids. This chapter explains the position adopted in this book, one

that contemplates discussing possible characteristics of psychopathology during evolution. Chapter 3 discusses some of the differences between biologists' and clinicians' conceptions of psychopathology and suggests a way of reconciling these differences by presenting theoretical examples of psychopathology during different phases of evolution. Chapter 4 reviews genetic aspects of psychopathology that raise the question of its possible phylogenesis. Here examples are given of the kinds of behaviors that may have been selected for or against during human evolution. Chapter 5 extends the theme of genetic implications by reviewing the writings of biologists who ascribe an active role to behavior in the evolutionary process. This is done to raise the question of whether manifestations of psychopathology may have affected the process of human evolution, and if so, how. Finally, chapter 6 pushes to the limit an evolutionary conception of psychopathology. I extrapolate from the writings of comparative psychologists and anthropologists generalizations about the adaptive character of behaviors that constitute some forms of psychopathology, examining how they succeed or fail to provide a general evolutionary account of psychopathology.

The second section deals with descriptive material. Chapter 7 reviews writings in ethology and primatology about abnormalities in social behavior among natural, feral communities of nonhuman primates, while chapter 8 summarizes researchers' efforts to develop animal models of psychiatric disorders. Chapter 9 reviews the work of social and behavioral ecologists as it pertains to phases of human evolution. My purpose is to portray the hypothetical social terrain, or cultural and behavioral ecology, during phases of evolution that would have affected how psychopathologies were manifested and interpreted. Chapter 10 reviews the writings of cognitive psychologists, cognitive archeologists, and linguists who address the question of behavior during human evolution to provide realistic pictures of what manifestations of psychopathology might have looked like in prehistoric times. Chapter 11 concentrates on the question of culture, considered as a system of social systems and their meanings, and discusses the kinds of influences that culture in the symbolic sense might have played in the configuration and enactment of psychopathology. Chapter 12 gives special attention to altered states of consciousness, also termed *states of dissociation*, and discusses what these states consist of, their evolutionary history, and how they could have influenced the origins of psychopathology. Chapter 13 is an extended inquiry into the question of how culture, language, and conceptual structures and mechanisms, assumed to be three separate cognitive traits produced by the evolutionary process, may have affected characteristics of psychopathology during evolution. These three properties of cognition are obviously interrelated and mutually influential. Nevertheless, for heuristic purposes, I find it instructive to analyze their potentially different influences on behavior and psychopathology by concentrating on hypothetical groups of Archaic humans.

The final section consists of recapitulation and synthesis. Chapter 14 reviews and consolidates the information presented in earlier chapters by outlining phases of the biological evolution of psychopathology. Its two centers of interest are that of the individual, or how psychopathology was individually manifested, and that of the group or audience witnessing the psychopathology. An afterword marks the boundary or area of focus of this book, the biological evolution of psychopathology, from developments that follow the emergence of modern humans, namely, the social and cultural evolution of human societies, behavior, and psychopathology.

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Psychiatry and
Evolutionary
Biology

Part I
