



# **In Defense of an Evolutionary Concept of Health**

**Nature, Norms, and Human Biology**

**Mahesh Ananth**

ASHGATE e-BOOK

## IN DEFENSE OF AN EVOLUTIONARY CONCEPT OF HEALTH

One of the most controversial contemporary debates on the concept of health is the clash between the views of naturalists and normativists. Naturalists argue that, although health can be valued or disvalued, the concept of health is itself objective and value-free. In contrast, normativists argue that health is a contextual and value-laden concept, and that there is no possibility of a value-free understanding of health. This debate has fueled many of the, often very acrimonious, disputations arising from the claims of health, disease and disability activists and charities and the public policy responses to them.

In responding to this debate, Ananth both surveys the existing literature, with special focus on the work of Christopher Boorse, and argues that a naturalistic concept of health, drawing on evolutionary considerations associated with biological function, homeostasis, and species-design, is defensible without jettisoning norms in their entirety.

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Nature, Norms, and Human Biology

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ASHGATE

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Published by  
Ashgate Publishing Limited  
Gower House  
Croft Road  
Aldershot  
Hampshire GU11 3HR  
England

Ashgate Publishing Company  
Suite 420  
101 Cherry Street  
Burlington, VT 05401-4405  
USA

Ashgate website: <http://www.ashgate.com>

### **British Library Cataloguing in Publication Data**

Ananth, Mahesh

In defense of an evolutionary concept of health : nature, norms and human biology making natural and normative sense of the human body as a bundle of biological compromises. – (Ashgate studies in applied ethics)

1. Boorse, Christopher 2. Health – Philosophy

I. Title

610.1

### **Library of Congress Cataloging-in-Publication Data**

Ananth, Mahesh, 1969-

In defense of an evolutionary concept of health : nature, norms, and human biology making natural and normative sense of the human body as a bundle of biological compromises / Mahesh Ananth.

p. ; cm. — (Ashgate studies in applied ethics)

Includes bibliographical references and index.

ISBN 978-0-7546-5852-8 (hardcover : alk. paper) 1. Health—Philosophy. 2. Medicine—Philosophy. 3. Naturalism. 4. Normativity (Ethics) 5. Evolution (Biology) I. Title. II. Series.

[DNLM: 1. Health. 2. Philosophy, Medical. 3. Ethical Theory. 4. Evolution. W 61 A533i 2007]

R723.A53 2007

610—dc22

2007005498

ISBN 978-0-7546-5852-8

Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall.

*For Rekha, Kathan, and Rohan*

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# Foreword

H. Tristram Engelhardt, Jr.

Health and disease are concepts upon which much in our culture turns. How we think of health and disease lies at the very core of medical practice, reflections on bioethics, and the formation of health care policy. How one understands these concepts bears on how one understands justice in health care and the proper allocation of medical resources. These concepts are cardinal for the philosophy of medicine as a whole and for bioethics in particular. In this very important book, Mahesh Ananth has brought together an ingeniously critical re-appraisal of debates bearing on concepts of health and disease through developing an evolutionary-homeostatic account of physical health. He focuses his energies on the controversies separating what have come to be termed naturalist versus normativist accounts of disease. For the purpose of this volume, (1) naturalists are those who argue that concepts of health, and for that matter of disease, are not socially constructed but objective and value-free, even though one may value or disvalue in different ways being healthy or being diseased, and (2) normativists are those who argue that concepts of health, and for that matter of disease, are socially constructed and in themselves value-laden, even though one may value or disvalue being healthy or being diseased. Other debates in the philosophy of medicine loom in the background. Aristotelians are naturalists, but not neutralists, in recognizing intrinsic values in health. There is also in the background the clash between nominalists and realists, who dispute as to whether the border identified between health and disease is an independent fact of the matter, or represents primarily a useful line to draw, but not one anchored in the way things are. This clash was reflected in the history of medicine in disputes about the nature of disease entities and was expressed in the early nineteenth century in the disagreements between ontologist (i.e., realist) and physiologist (i.e., nominalist) theories of disease.

The central figure in the book's analysis is Christopher Boorse, whose work has served as one pole in the debates between naturalists and normativists, and who is the most prominent defender of the naturalist position. My work in this area has been in dialectical interchange with Christopher Boorse for nearly a third of a century. Much of the debate has taken shape around various responses to Christopher Boorse's arguments, and this book is no exception.

Ananth's work draws extensively and fruitfully on the last half-century's complex literature regarding concepts of health and disease. The reader finds in this book a balanced exploration of this battleground of philosophical argument. Both sides in the debate will appreciate the care with which Ananth has developed his analyses and arguments, even though he comes down clearly on one side by defending a naturalistic concept of disease, although still taking norms seriously and recognizing the context-dependent (that is, environment-dependent) character

of the concept of health. He advances his account by developing a forward-looking version of evolutionary functional naturalism that identifies functions in terms of their conferring an enhancing propensity on creatures that possess them, so that this propensity contributes to an increased individual survival or reproductive success. In this way, he seeks to free himself in part from etiological accounts that are backward-looking through being tied to evolutionary causal history.

In all of this, a key question remains for future debate and reflection, namely, whether there are quite different clusters of concepts of health and disease nested within different kinds of practices, in particular, the practices of the unapplied versus the applied sciences. One must wonder whether one cluster of understandings may be embedded in a biological-scientific context that presupposes the defining importance of individual survival and reproductive success, and the other embedded in the clinical practice of medicine with foci of concern beyond mere survival and reproductive success. Did Boorse attempt to reconstruct accurately the concepts of health and disease as these function in the unapplied science of human biology, while failing to attend to the value-laden character of these concepts within the applied context of clinical medicine? The need remains to explore these issues carefully in the light of a philosophical history of medicine that can aim us better to gauge how concepts of health and disease have actually done their work in clinical medicine over time.

Wherever one stands in these debates now and in the future, one will find in Ananth's work a well-developed fabric of arguments that must be taken seriously by all subsequent literature in the field. Although this is Ananth's first major work, it is an opus magnum; it is a work of serious depth and substance. It has significant implications for core debates in the fields of the philosophy of medicine, philosophy of biology, and for that matter in bioethics.

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# Preface

When I was searching for a dissertation topic in graduate school, the concept of health was suggested to me by my soon-to-be dissertation advisor, Fred D. Miller, Jr. I decided to review some of the literature on the debate and quickly became engrossed with the topic. I soon discovered that my interests in Philosophy of Science (especially Philosophy of Biology), Bioethics, and Ancient Greek Philosophy could all be satisfied by this one topic. Although much of the Ancient Greek philosophical debates about the nature of health are not included in this book, I was deeply inspired by those debates. Broadly speaking, moreover, many of the contemporary debates on the concept of health are (in part) a repeat performance of the philosophical toil of Ancient Greek thinkers like Empedocles, Plato, Aristotle, Hippocrates, Galen, and others.

The philosophy of health belongs to a genre that intersects philosophy of science (specifically philosophy of biology), philosophy of medicine, sociology, history, value theory, metaphysics, bioethics, and philosophy of psychology. Given the range of disciplines that intersects the health literature, philosophers of health would not only have philosophers as their target audience, but also those in the fields of biology, medicine, history (of science and medicine), psychology, and many other specialties within the field of health care. No doubt, it would be a near-impossible task to be able to speak persuasively and intelligibly to all of these audiences in a single book and I do not attempt to do so here. The focus of this book is the contemporary philosophical battle between “naturalists” and “normativists.” Even so, there is an enormous literature on this circumscribed region of the philosophy of health. For example, both physical health and mental health are discussed within this particular debate.

After struggling to locate my “domain of discourse,” I had a wonderful exchange with Michael Bradie, my Philosophy of Science/Biology mentor and dissertation committee member, who suggested focusing on the work of Christopher Boorse—a leading contemporary proponent of a naturalistic concept of health. Upon examining Boorse’s works, which spans over twenty years, I was able to locate a project that not only satisfied my interests, but was both manageable and could still engage the debate between the “naturalists” and the “normativists.” Moreover, David Copp, a member of my dissertation committee, offered much guidance on the normativity dimension of the debate and L. Fleming Fallon, Jr. (M.D.), the external reviewer of my dissertation, was kind enough to suggest many of disease topics that make up the final chapter of this work.

In summary, through a critical examination of the work of Christopher Boorse, this book (which is a modified version of my dissertation) attempts both to adjudicate the debate between the naturalists and the normativists regarding the concept of health and to defend an evolutionary concept of health, which draws on concepts of biological function, species, and homeostasis. Although, at the end of the day, there

may be objections to my defense, I submit that the evolutionary-homeostatic concept of health developed within these pages is a reasonable account of the concept of physical health.

# Acknowledgments

I am grateful to Fred D. Miller, Jr., Michael Bradie, David Copp, and L. Fleming Fallon, Jr. Their assistance, guidance, and encouragement on the dissertation version of this project continue to be inspiring. Indeed, Fred Miller, the chair of my dissertation committee, was unwavering in his support and his copious feedback—a mile was never taken because an inch was never given! Michael Bradie was always available to debate my arguments with lively exchange. David Copp’s critical feedback always reminded me of what it means to do philosophy. And L. Fleming Fallon’s medical training was a source of much insight.

Of course, I acknowledge my family. First my parents, Santha and P.V. Ananthakrishnan, whose love and support were always unwavering and still palpable. Some debts can never be repaid fully. Moreover, I thank my sisters, Jayanthi and Vasanthi, for keeping an eye on me through the many tough times.

Notably, I appreciate the late night discussions of this project with Ben Dixon, Radha Murthy and Uma Ayer (M.D.) who pushed me to clarify and rethink a number of my arguments. Their patience and thoughtful criticisms were both helpful and motivating.

I am also appreciative of the many years of professional assistance and convivial relief from the Social Philosophy and Policy Center.

Finally, I would like to thank my wife, Rekha, for her love and support. Her willingness to follow me around from New York to Ohio and to Chicago speaks for itself. She and our sons, Kathan and Rohan, have been the source of much strength. I dedicate this book to them.

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## Chapter 1

# Introduction to the Concept of Health

### Topic of Study: The Importance and Priority of a Concept of Health

This work is a contribution to the extensive philosophical literature on the concept of health. Given that a concept of health is indispensable to (1) the practices of medicine,<sup>1</sup> (2) the many debates surrounding public policy issues,<sup>2</sup> and (3) the ethical concerns that loom over the decisions made by medical practitioners,<sup>3</sup> it might be presumed that much progress has been made with regard to the concept of health. In fact, there is still a notable lack of consensus concerning the concept of health among scholars and healthcare professionals. Lennart Nordenfelt offers the following summation of this problem:

The entire medical enterprise—theoretical and clinical research as well as medical practice—has human health as its ultimate end. Health, as well as disease and illness, must be in the focus of medical attention ... In spite of their central place, however, and in spite of numerous efforts directed to the clarification of the concepts of health and disease, there is far from universal agreement about their nature. In fact, the controversies are quite profound ... [O]ne encounters anthropological, sociological, psychological, and

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<sup>1</sup> Robert Mordacci emphasizes just this point when he claims that “the very end of medicine depends in great part on our understanding of the nature of health and illness both as objects of medical intervention and as experiences of the person.” Robert Mordacci, “Health as an Analogical Concept,” *The Journal of Medicine and Philosophy*, 20/5 (1995): 477. See also Leon R. Kass, “Regarding the End of Medicine and the Pursuit of Health,” *Public Interest*, 40/1 (1975): 11–42, and Arthur Caplan, “Does the Philosophy of Medicine Exist?” *Theoretical Medicine*, 13/1 (1992): 67–77.

<sup>2</sup> See *The Price of Health*, eds George J. Agich and Charles E. Begley (Dordrecht, 1986), Norman Daniels, *Just Health Care* (Cambridge, 1985), Victor R. Fuchs, “Concepts of Health—An Economist’s Perspective,” *The Journal of Medicine and Philosophy*, 1/3 (1976): 229–37, Susan Giaimo, *Markets and Medicine: The Politics of Healthcare Reform in Britain, Germany, and the United States* (Ann Arbor, 2002), Jeffrey D. Milyo and Jennifer M. Mellor, “Is Inequality Bad for Our Health?” *Critical Review*, 13/3–4 (2000): 359–72, and David T. Ozar, “What Should Count as Basic Health Care?” *Theoretical Medicine*, 4/2 (1983): 129–41.

<sup>3</sup> For some of these moral problems, see, *Contemporary Issues in Bioethics*, 5th edn, eds Tom L. Beauchamp and LeRoy Walters (Belmont, 1999), Thomas M. Garrett, Harold W. Baillie, and Rosellen M. Garrett, *Health Care Ethics: Principles and Problems*, 3rd edn (Upper Saddle River, 1998), and *Intervention and Reflection: Basic Issues in Medical Ethics*, 5th edn, ed. Ronald Munson (Belmont, 1996).

biological theories, as well as combinations of these. The contents of the various theories are quite different and often quite difficult to compare.<sup>4</sup>

Despite the pressing need for a cogent concept of health across disciplines, no single account has been agreed upon to address adequately the many practical and theoretical difficulties associated with (1)–(3) above. The problem, thinks Nordenfelt, is that the assumptions and agendas of different disciplines come into conflict, rendering “consilience” near impossible.<sup>5</sup>

Therefore, the goal of this project is to provide a *naturalistic* concept of health that is able to parry some of the difficulties encountered by previously proposed concepts. Before turning to a sketch of this naturalistic approach, the general problem under consideration in this project needs to be made clear.

### *The Concept of Health Debate: Naturalists Versus Normativists*

The problem with offering a definitive account of health is apparent in the World Health Organization’s (WHO) definition. In 1947, the WHO offered the following statement about health: “Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity.”<sup>6</sup> There is a great deal that must be unpacked in this rather broad definition of health. What does the WHO mean by “complete”? Moreover, what does it mean by the use of “physical,” “mental,” and the supposed distinction between these two terms? Further, what does the WHO have in mind when it employs “social” and “well-being” to define “health?” Finally, what is the meaning of “disease” and “infirmity” in the WHO’s definition of health? These terms need to be explained carefully so that a detailed account of health can be made manifest.

Indeed, many contemporary scholars, who have offered their own theories of health, have, in effect, refined, supplemented, and, in some cases, abandoned or accepted entirely the WHO’s definition of health. Specifically, in the last few decades, philosophers, sociologists, psychologists, and scientists (chemists, biologists, ecologists, neuroscientists, etc.) have provided accounts of health that pick out one or more of the above terms as definitive constituents of a concept of health. As a result of this scholarship, the following two schools of thought with respect to the concept of health have emerged:

1. Health as a Natural Concept
2. Health as a Normative Concept

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<sup>4</sup> Lennart Nordenfelt, “Introduction,” in Lennart Nordenfelt and B. Ingemar B. Lindahl (eds), *Health, Disease, and Causal Explanations in Medicine* (Dordrecht, 1984), p. xii.

<sup>5</sup> Edward O. Wilson defines “consilience” as “literally the ‘jumping together’ of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork of explanation.” See Edward O. Wilson, *Consilience: The Unity of Knowledge* (New York, 1998), p. 8.

<sup>6</sup> World Health Organization, “Constitution of the World Health Organization,” *Chronicle of the World Health Organization*, 1/1–2 (1947): 3.

The contemporary debate on the concept of health is basically between *naturalists* and *normativists*. The fundamental issue concerns the role of values with respect to the scope of medicine.

On the one hand, although health may be valued or disvalued, naturalists argue, the concept of health is itself a value-free concept. For example, naturalists contend that whether a heart is healthy or diseased is an *objective* matter to be determined by relevant medical scientists. It is entirely a separate matter, they argue, whether or not such a condition is of value. Michael Ruse describes the naturalist perspective as follows:

The naturalist approach...attempts initially to approach matters in a nonvalue-laden fashion. In particular, the notion of disease, the concept of disease, is defined without respect to the implications for the bearer—whether they be good or bad, happiness-generating or otherwise, or anything else of this emotive nature. Essentially, a healthy state is taken to be one of proper functioning, that is to say, proper functioning for the species *Homo sapiens*. A diseased state is taken to be one that, in some sense, interferes with this proper functioning.<sup>7</sup>

Thus, naturalists deny that values are part of the concept of health, on the grounds that health essentially involves only the *functional* activities of organisms and their parts.

In contrast, normativists argue that the concept of health is value-laden. Their justification is two-fold. First, they claim that, since science itself is littered with values, medical scientists (e.g., pathologists or physiologists) cannot escape incorporating values into their concepts. For example, in response to those who think that concepts of health and disease can be understood from a value-neutral scientific perspective, George Agich offers the following reply:

This approach is based on an unacceptably simplistic view of science as value-free. In these terms, medicine appears value-laden and is often criticized for that reason. Work in philosophy of medicine, however, has helped question this view and aided in the recognition that science, too, is a practice laden with particular value as well as conceptual commitments.<sup>8</sup>

Second, normativists claim that the scope of the concept of health is ultimately tethered to diagnosis *and* treatment of patients within a cultural/social context. Talcott Parsons defends this normativist position from a social context perspective as follows:

Health may be defined as the state of optimum *capacity* of an individual for the effective performance of the roles and tasks for which he has been socialized. It is thus defined with reference to the individual's participation in the social system. It is also defined as

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<sup>7</sup> Michael Ruse, "Defining Disease: The Question of Sexual Orientation," in James M. Humber and Robert F. Almeder (eds), *What is Disease?* (Totowa, 1997), p. 143.

<sup>8</sup> George J. Agich, "Disease and Value: A Rejection of the Value-Neutrality Thesis," *Theoretical Medicine*, 4/1 (1983): 36–7. Agich's argument will be discussed in detail in Chapter 6.