

FOREWORD



Framing Health, Risk, and Adversity

Alan Goodman

I think that the tendency of applied science is to magnify injustices until they become too intolerable to be borne, and the average man whom all the prophets and poets could not move, turns at last and extinguishes the evil at its source.

—J.B.S. Haldane, 1923

After completing a large-scale review of worldwide variation, James Tanner, the preeminent British expert in human growth and development, surmised that mean adult heights invariably increase with greater socioeconomic status. This association, he stated, is consistent for all historical periods and in many dozens of countries around the globe. To say it more grandly still, everywhere that Tanner looked, and he looked in a remarkably large and varied number of places, socioeconomic status was indelibly written into and onto the body.

During the 1960s, when Tanner first summarized his findings, the links between socioeconomic conditions and biological outcomes were less well studied than they are today. Now, thankfully, there are burgeoning fields of social medicine and social epidemiology, devoted to understanding the social, economic, and political origins of illness and disease. As well, anthropologists have begun to reconsider how social and economic conditions inscribe themselves onto bodies. As the editors of this volume point out in the introduction, leading theorists and practitioners of social epidemiology have called for studies of the political-economic and social origins of disease,

or as Nancy Krieger (2001) proposes, an eco-social theory of disease. In this new human biology, group height and health have their origins in social interactions and institutions.

This insight about the social origins of biological difference and suffering is profound for human biologists who have gotten used to looking toward proximate physical and biological explanations, rather than distant social explanations. Yes, tracing back through Boas, anthropology and human biology have a long history of efforts to link social and economic conditions to biological outcomes. That said, the attention of human biologists and anthropologists has certainly been less sustained on the social and the economic and more sustained on proximate environmental factors such as temperature, oxygen availability, and energetic yields. It is not that this focus is wrong, in fact it is essential. However, it might also be insufficient.

Acknowledging the eco-social origins of biological maladies is the easy part. The hard work is unraveling the myriad way that the eco-social becomes local and get under the skin. How is the eco-social embodied? While we are now aware of many strong associations between eco-social conditions and biological outcomes, we have little sense of the causal processes that underlie these associations. Moreover, as a number of authors in this volume note, social conditions are notoriously fickle and flexible: They make terribly unreliable variables.

In 1992, Thomas Leatherman and I brought together a group of biological anthropologists and other social and biological scientists who were interested in rethinking biocultural intersections. Like the symposium upon which this book is based, ours was also funded by The Wenner-Gren Foundation for Anthropological Research. Then, we wished primarily to explore a way to move biological anthropology to focus more on the root political-economic causes of disease risk, adversity, and illness (Goodman and Leatherman 1998). The group helped to move the focus of inquiry from biophysical stressors to sociocultural stressors as central to health, from evolutionary adaptation to the adaptive constraints brought on by poverty and inequality, and from race as a risk group to racism. We highlighted, with some success, the political economy of health for biological anthropologists.

What we did less well is to explore the mechanisms and processes by which the eco-social and the biological are linked. Since our symposium, a number of publications have begun to specify these processes and mechanisms. *Health, Risk, and Adversity* is a great leap forward, taking us further than we have ever been.

The editors, Catherine Panter-Brick and Agustín Fuentes, have brilliantly organized *Health, Risk, and Adversity*. Each section of the book includes juxtaposed chapters from a medical or biological anthropologist, an epidemiologist, and a clinician. They maximize the opportunities for readers to make their own connections. More important still, there are ample summations to guide readers from all fields and all levels of expertise. In addition to an introduction by the editors, the volume includes section commentaries from eminent scientists.

This book is special. First, it interrogates how scientific ideas and concepts are shaped by the intersections of scientific and popular discourses. For example, the editors (Introduction) and many of the authors detail how “risk” is both a categorization (being in a risk group) and a statistical notion (degrees of risk). Both ideas about risk are powerful discourses that shape causal thinking and the political economies of research and clinical practices. Yet, risks are statistically real as well.

Second, the volume as a whole goes further than any I am aware of in explicating the *specific mechanisms and processes* by which the eco-social gets under the skin. How is it that adverse situations such as poor diets, exposure to infectious agents, and physiological stress lead to disease in some but not in others? The chapters outline many potential mechanisms that are worth further exploration.

Reading this book reminded me many times of the famous parable about the political economy of health. The original is credited to the medical sociologist Irving Zola and has been modified to fit critical medical anthropology by Nancy Scheper-Hughes. As Lorena Madrigal and colleagues note in Chapter 9, the parable was modified by me and Thomas Leatherman to fit work in biological anthropology. It goes something like this:

A group of anthropologists sitting on a river bank are startled by the screams for help of a drowning individual. Just as the first body floats by and eventually out of sight and sound, another and then many others float down the river. The anthropologists discuss and debate what is going on. One of them sets off to find someone with biomedical training. Another, remembering her old CPR course, dives heroically into the waters. She manages to pull out and resuscitate a few individuals before exhaustion overcomes her. None of the anthropologists wanders upstream to expose the systems of hierarchy that are throwing individuals into the river.

Inequalities are written in myriad way onto and into human bodies. Inequalities have biological consequences and the biological consequences add up and may result not just in increased adversity, failing health, and shorter lives, but in the declining resistance of mothers and caretakers, thus upsetting household coping and the ability to resist further insults. Poverty is a viciously biocultural cycle.

The chapters in this book provide grounded theory. They enrich our sense of the history and evolution of health and the contemporary political-economic factors that operate downstream and get under our skins. The interdisciplinary conversation has begun to turn a social human biology from a series of thoughts and mediations into a program of research.

It is time for anthropologists to work with each other and fellow social and medical scientists to take a deep and long look at how individuals and groups become vulnerable and how inequalities in health arise and become bioculturally cyclical. This volume gets us as far as we have ever been.

The authors and editors are not only wandering gallantly into the stream of human risk and adversity, they are trudging up stream against powerful tides.

References

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- Krieger, N. 2001. Theories for social epidemiology in the 21st century: an ecosocial perspective. *International Journal of Epidemiology* 30: 668–77.