

# I Wish I'd Made You Angry Earlier

ESSAYS ON SCIENCE AND SCIENTISTS

by Max F. Perutz

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Max Perutz is renowned for discovering the structure of hemoglobin. He and his colleagues disclosed the tetrameric structure of methemoglobin in 1970, 33 years after he had set himself that task while still a graduate student at Cambridge. There's devotion for you!

This book is a collection of his essays, and in one of the best, "The Second Secret of Life," he describes how the dynamics of the three-dimensional structure of hemoglobin, atomic positional changes of a mere half-angstrom unit, make respiratory physiology, and life as we know it, possible—molecular biology at its most dramatic.

In a sense, Perutz has written a kind of autobiography with this book. All of the essays tell us about the extraordinary range of ideas that excite him, and in reading it, I had the feeling that there was a connecting thread—a curiosity about the process of scientific discovery.

In "I Wish I'd Made You Angrier Earlier," he recounts a defining moment in his early struggles to interpret protein crystallography. The title quotes the reaction of his mentor, W.L. Bragg, to Perutz kicking himself for "having missed building that beautiful structure himself." He was referring to the alpha helix as we now know it.

In "Enemy Alien," Perutz describes his wartime experiences as a prisoner of war in both the UK and Canada, and subsequent war-time work with the government. There are some fascinating biographical notes in this essay. Hermann Bondi and Klaus Fuchs are vividly recalled as fellow internees. After his release, Perutz collaborated with Geoffrey Pyke, who wanted to turn icebergs into aircraft carriers. Pyke was a dreamer who drove the admirals mad. Needless to say, the iceberg idea eventually sank.

It is easy to pick out Perutz's favorite es-

says. In "Splitting the Atom," he reveals his admiration for Lise Meitner's "selfless passion for science, her warmth and her sense of humor." In "Liberating France," he shows his sympathy for Francois Jacob's attitude to scientific research: "a life animated as much by passion as by logic."

Peter Medawar's brilliance and stylishness are affectionately recalled in "High on Science." And in "What Holds Molecules Together?" Perutz sums up the incredible achievements of Linus Pauling and forgives his showmanship and geriatric aberrations.

In "A Passion for Crystals," he makes no attempt to hide his love for fellow crystallographer Dorothy Hodgkin. Of this remarkable woman he writes, "there was magic about her person. She had no enemies, not even among those whose scientific theories she demolished or whose political views she opposed. Just as her X-ray cameras bared the intrinsic beauty beneath the rough surface of things, so the warmth and gentleness of her approach to people uncovered in everyone, even the most hardened scientific crook, some hidden kernel of goodness."

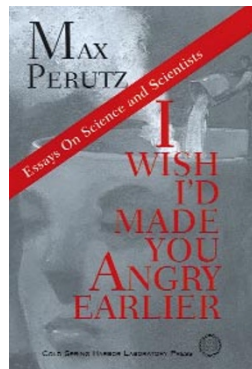
Perutz gives his own assessment of the

contents of this book in the preface. "This book," he writes, "includes detective stories, tales of conflict and battle, a woman's love affair with crystals, a man's gruesome fascination with poison gas, cancer cures as Noble Laureates' geriatric illusions, an onslaught on social relativists, a war hero's anticlimactic homecoming that led to a Nobel Prize, phantom perils threatening to poison us, and real perils conquered by silent heroes."

This is a brilliant trailer for the book because they are all in it. At the end of his preface, he invites readers to skip to the next essay "if they don't want to

know all that." My advice to readers is that if they have to skip something, do not skip the preface—it is full of goodies.

The essays are beautifully written, with flashes of wit and humor. Many of the essays were written for the New York Review of Books; anyone addicted to that journal, as I am, will at once get a feel for the style of these essays. I read this as a bedtime book, so I dipped into it at random. When I finally found that there was no more to read, I felt quite disappointed—no more chocolates in the box!



## Human Biology and Social Inequality

SOCIETY FOR THE STUDY OF HUMAN  
BIOLOGY SYMPOSIUM 39

Edited by S.S. Strickland  
& P.S. Shetty

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In recent years there has been a resurgence of interest in variation in health status within populations. Health inequalities within populations have become the focus of a number of descriptive and analytical studies, and the volume *Human Biology and Social Inequality*, edited by Strickland and Shetty, is

another contribution to this body of work. A collection of 17 authored chapters, this book is based on the 39th symposium of the Society for the Study of Human Biology.

*Human Biology and Social Inequality* presents a useful and informative publication covering a very broad range of topics on health and social inequalities and their interrelation. Because it covers a large terrain—from the contribution of childhood malnutrition on conventional test scores and social performance, to the analysis of female reproductive decisions and their effect on social inequality in male reproductive fitness in 18th- and 19th-century Germany—it is difficult to adequately represent its diversity and richness here. However, a number of themes arise regularly, and reflections on these are worth serious discussion:

### Health inequalities

Health inequalities can be defined and measured in many ways, some of which are presented in different chapters in the