

Biology and freedom

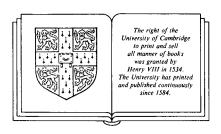


# Biology and freedom

An essay on the implications of human ethology

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Is human nature incurably depraved? If it is, reading this book will be waste of time.

G.B. Shaw



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### Preface

No book can ever be finished. While working on it we learn just enough to find it immature the moment we turn away from it.

K.R. Popper<sup>1</sup>

On her deathbed, the poet, Gertrude Stein, turned to a friend and asked, 'What is the answer?' When the friend, unable to speak, made no reply, she said, 'In that case, what is the question?' In the late twentieth century, the first question that we face is not in doubt. Modern technology and modern politics combine to enable us to commit mass suicide, and we have to decide whether to do so. This book is written in the belief that we and our descendants will choose survival, not self-destruction, and that, in human society, there will be not only change but progress.

Like our ability to destroy ourselves, future progress depends in part on our use of scientific knowledge. The traditional image of science has two faces, both benign: science helps us to know the world; and it gives us power. But science is also a source of myths.<sup>4</sup> When modern physics began, it became easy to think of the universe as a system of which all parts obey Newton's laws of motion. Yet this conclusion does not follow from Newtonian mechanics: it is an assumption. And indeed the whole notion was overthrown by Einstein's theory of relativity.

During the past century, biology, not physics, has become a leading source of our pictures both of the world and of ourselves. It has provided descriptions of the human species each founded on ideas, of narrow scope, derived from the work of specialists. The present book has grown from attempts to answer questions about these images. Are we doing ourselves justice when we equate human societies with those of baboons, or human intelligence with that of a dog salivating at the sound of a bell? To answer, the images, or models, must be put in a much larger picture than is usually provided.

Such a task presents severe difficulties, for the modern biological images of humanity are not merely biological.<sup>5</sup> Some are supposed to tell us how we can plan ideal communities, how we should bring up our children, and how we should treat mental illness. Others propose biological explanations



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for our inhumanity to our fellows, or for our greed and lust for power, with the seeming implication that these disagreeable characteristics are part of our nature and beyond remedy. Confident proposals on these lines are presented to the public, by all the available means, as the last word of science. Catch-phrases resembling advertisers' slogans, such as the territorial imperative, the naked ape and the selfish gene, enter the language, and each brings a message.

Whatever their authors' intentions, the images of humanity, represented by such phrases, provoke cynicism about the future. Accepting these portraits is likely to weaken our resolve to cope with present dangers: they make it seem pointless to try to change things for the better. The images also conceal what is valid and useful in the sciences on which they are supposed to be based.

They are, however, also beneficial. They oblige us to face fundamental questions, factual and moral, about ourselves. We then have to examine, side by side, diverse kinds of knowledge: for example, findings on dominance among animals and on the great variety of human social systems. We have to ask whether the theory of evolution has any bearing on, say, Machiavellianism in politics or on the concept of original sin; and whether laboratory experiments on the effects of reward and punishment tell us anything useful about why we work, or about the enigma of free will.

When writing on such themes, it is easy to fall back on vague generalization or mere conjecture. One objective of this book is to show that there are plenty of relevant facts, to describe some of them, and to say where others can be found. The examples used are those most significant for 'western' readers. Although the fundamental questions are universal, an audience in China or India or the USSR would need a different book.

Many of these fundamentals appear repeatedly, in widely separated chapters. I hope therefore that readers will find it convenient to read the book straight through. Some will wish to go more deeply into special topics, or to confirm that the strange statements and events mentioned are correctly reported. For them there are notes and a bibliography. There is also an appendix on the meanings and uses of key words.

The fashionable myths of today will fade, but crucial questions that they raise will remain. This book is above all about such questions. It suggests some answers. But the important thing is for readers to be ready to debate the questions, and to act when they have reached conclusions for themselves.

Karl Popper's resigned comment, quoted in the epigraph, applies with special force to a book such as this. But others will do better.

S.A. Barnett



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Part 1

An introduction