

# The Evolution of Ethics

*An Introduction to Cybernetic Ethics*

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*The Evolution of Ethics* constructs a conceptual bridge between biology and human behavior. This is accomplished by examining the cultural and biological feedback systems that inspires the evolution of social rules. In theory, a cybernetic process is at the heart of developing ethical systems. This process occurs when biology and culture collide. The resulting conflict acts as a form of "informational feedback" telling people that there are serious problems that need to be resolved. Conflict inspires human adaptation in a way that extends the survival of the species. In this sense, the evolution of ethical systems is a response to the drive of the human species to survive. Additionally, a whole array of related "rule systems" such as statutory laws, professional codes, customs, and even the rules of etiquette evolve to further human adaptation. Please note: "Ethical systems" are reasoned rules of conduct that derive from past experience while moral laws (informally known) evolve over centuries of time and are many times are influenced and expressed by human emotions. Nevertheless, the words moral and ethical are often used interchangeably.

**Author's note:** Below is a summary of concepts found in this book. A simpler, but more precise, explanation of evolutionary ethics can be found in the first four chapters. Other evolutionary ethics web sites are located on a separate page.

## Science and Ethics

Evolutionary Ethics has no (necessary) logical connection to the formal ethics of philosophy. This is to say one does not need to know philosophy to know how ethics have come to be. The words "The Evolution of Ethics" could be more precisely stated as "The Evolution of Ethical Systems." Ethics is best described in scientific terms rather than the contingent and speculative terms of philosophy.

## Cybernetic Ethics

Ethics merges with science in cybernetic ethics. This book presents a persuasive theory describing how ethics can (and should) be linked to science and mathematics. Here, there are objective moral standards\* that can be derived from the consequences of human actions. The evolution of ethical systems is shown as an "adaptation." Humans adapt to survive and they do so by creating standards and rules of behavior to stop viscous cycles of pain, suffering and death. The more organized and efficient human activities become, the more certain the survival of the species becomes. The science of cybernetics best describes this process. Norbert Wiener first developed cybernetic science in 1947. In this book, cybernetics means "informational feedback in dynamic systems" (such as a social system) that sustains or redirects behaviors. [See example.](#)

Note: The underlying principle of survival shows itself in the smallest details of life. Individual survival, family survival and national survival are all subcategories of the principle of human survival.

[Definitions](#)[Defining Survival In an Ethical Context](#)[The Integration of Science & Ethics](#)[Quantum Considerations](#)[PDF of the Chapter](#)**Asking a Different Question**

When the subject of ethics arises, reasonable people often ask, "Who's to say what is right or wrong?" When ethical development is viewed as a science, it is not so much who's to say an action is morally right or wrong, but rather, "What's to say an action is right or wrong?" The "what" is defined by inherent physical and psychological limitations within personal circumstances that make it impractical or imprudent to pursue certain behaviors, attitudes or methods of reasoning. There are reasons why ethical systems evolve. Ethical systems guide people away from pain, suffering and death and redirect their activities toward peace, prosperity and productivity. Rules of conduct bring order to societies, making them more efficient and sustainable.

**Reason Rather than Relativity**

The foundation of ethical evolution can be shown to rest on reason rather than relativity. Human morality (and the ethical systems that arise from it) is to some extent relative to time and place. But the underlying principle of the evolution of ethical systems remains the survival of the human species. The existence of multiple moral systems reveals a compartmentalization of moral structures, much like a ship is compartmentalized to give it more strength and integrity. This approach sheds some light on the centuries old conundrum of ethical relativity and first principles of ethics, and how the two coexist and retain their logical integrity.

**Ethics & Philosophy: Ethics of the past**

There is a long-standing belief among philosophers that all moral knowledge is inherent in the words of a language. This idea is reflected in the "is-ought dichotomy" of David Hume and the "naturalistic fallacy" of G. E. Moore. There, the objective of ethical reasoning is to analyze ethical statements—not to reason scientific facts, observations or human experience. For example, even if thousands of people are injured or killed by the excesses of drinking alcohol and then driving cars, one cannot formally reason that one "ought not" drink and drive. This is because the formal philosophical reasoning of meta-ethics stresses an analysis of the language and not scientific facts, observation or experience. Meta-ethics is a very popular form of ethical reasoning. Here, the underlying reasons why a particular ethical position is considered "right" or "wrong" are never questioned. For instance, in meta-ethical thinking, rape is considered neither right nor wrong despite a long history of reasons that make rape seem wrong. Ethics concerns human behavior. Some behaviors are discernibly better than others in terms of the consequences behaviors inspire. Being ethical is about making choices—not analyzing the properties of ethical statements. The study of ethics will be a more relevant and understandable discipline when it is removed from the field of philosophy and placed entirely in the realm of science. [see why ethics belongs in the field of science, not philosophy.](#)

**Science & Religion**

Evolutionary ethics need not clash with religious beliefs. For example, adultery to a religious person might seem "wrong" because it defies the will of God. On the other hand, adultery might also be reasoned as "wrong" by a moral scientist using secular logic. A scientist might draw conclusions from conflict analysis. Such an analysis would likely describe in understandable terms how adultery violates the law of efficient action (and therefore should

be discouraged as generative human behavior). The analysis would explain how human social systems must also be stable systems to survive long-term. Therefore, efficient action is an important factor in deciding human conduct. The scientist and the religious believer do have common interests. see [systems](#)

### **In Summary**

Evolutionary ethics is a controversial subject. This book challenges the notion that evolutionary ethics belongs in the domain of philosophy and explains the benefits of its placement in science. Evolution, after all, springs from science and not philosophical speculation. In scientifically based evolutionary ethics, facts, observation and human experience are of central importance. In philosophically based ethics, the focus is on an analysis of ethical words, the properties of ethical language and questions of value, etc. The field of philosophy has had difficulty integrating fact, observation and experience into its formal ethical reasoning. Philosophy has never been able to resolve ethical issues in a relevant and substantive way. It is time for ethicists to move away from philosophical language and toward scientific methodology and description.

Note: To visualize the role of ethics in a scientific context, think of it as the study of human nature: It is the study of how things go wrong in society—and how to fix those problems by codifying behavior.

*Chapters 1-4 present an easy to read theory of ethical evolution.*

## **(The Book)**

### **Preface to the Evolution of Ethics**

This book develops the idea that there is a rational basis for the existence of ethics. Such an approach is daunting because the idea of reason or rational causes at work in the formation of ethics has been seriously challenged since the eighteenth century Enlightenment. However, there have been developments in biology and cybernetics that lead to a comprehensive theory of morality in which the rational nature of ethics can more easily be explained. Not only can the rise of ethical systems be linked to biological concepts, but ethics can be tied to mathematical concepts as well by way of cybernetic science. When ethics and cybernetics are combined, the resulting theory turns on scientific principles instead of philosophical speculations.

There are several important ideas linked to the emergence of ethical systems: first, that ethical systems evolve in response to the human need to survive in an environment where they are competing with many other organisms for scarce resources; second, that humans survive and flourish by efficiently using their resources and energies; and third, that the evolution of ethical systems is a function of an ongoing cybernetic process involving all humans, animals, and organisms.

Human experiences accumulate as a reservoir of knowledge, which influences the societal perception of which behaviors benefit people and which act counterproductive to their health and welfare. When people deviate from behaviors that are known to be productive, feedback arises that affects their lives in both subtle and obvious ways. Thus, the way in which people write laws and attach moral significance to certain behaviors is linked to a cybernetic process that maximizes human survival, minimizes social conflicts, and increases the meaningfulness of the human experience. Feedback that inspires change enhances the human ability to survive and to compete with other animals and organisms. This is important in the sense that some biologists believe that ninety-nine percent of all species that have ever existed are now extinct.

In order to build a bridge between the biological world of organic struggles for survival and the

moral world of right and wrong, a simplified explanation of the evolutionary process is presented. This is necessary to illustrate how survival inspires a cybernetic process leading to the rise of ethical systems. The resulting theory sounds similar to some of the ideas of Thomas Hobbes. Where the two systems differ greatly is that the evolution of ethical systems here is viewed as an extension of a biological process, grounded in cybernetic principles, whereas Hobbesian philosophy derives from traditional ethical thinking touching on linguistic and meta-ethical aspects of reasoning.

What is important to note is how conflicts and potential conflicts act as a form of cybernetic feedback to society that alerts people to make changes in the way they behave. Feedback is an essential ingredient in evolutionary growth. Traffic laws vividly illustrate how the forces of human survival and the need for the synchronization of many parts work.

While the ideas of individual philosophers are not discussed directly, their relevance is implicit in the writing. Biological perspectives likewise do not address biological theory directly on a technical level. Books such as *Living Systems*, by James Grier Miller; *The Selfish Gene*, by Richard Dawkins; and *Mankind Evolving*, by Theodosius Dobzhansky are more appropriate sources, in a field of many good books, for understanding biological phenomena. These three books illuminate the complexity of biological systems in a way that ultimately leads to ethical questions. For instance, the idea of incorporating the notion of organization and efficiency in ethical theory has its analog in Miller's living systems theory. Here it seems evident that successful organic strategies for survival have created extremely complex and efficient hierarchies of order in nature. The principles governing the evolution and survival of lower organisms seem much the same as the forces driving the development of moral systems. Living systems theory invites the question that if organic systems are so incredibly diverse and complex, why would the nature of moral systems be any different, suggesting that philosophical conundrums of the past regarding the nature of morality stem from underestimating the complexity of moral science.

In Richard Dawkins' writings there are illustrations of how pervasive the struggle for survival is. Such struggle involves not only humans but lower organisms, all competing with each other for scarce resources. Dawkins' ideas are important in realizing that humans, after all, still act involuntarily on a biological level. Like it or not, struggles manifest in elegant and concealed forms have endured and proliferated to this day in human societies. Both Miller's and Dawkins' writings lend visual texture to the sense of complex systems uniting in cooperative strategies to further their mutual survival. The rise of ethical systems in this sense is a cooperative effort of humanity that has the effect of optimizing its energies and resources in an ever increasing dynamic of survival guided by cybernetic principles.

Dobzhansky's work is crucial to understanding how human beings adapt to a hostile environment by changing the way their cultures are structured. The idea that human culture is an instrument of biological adaptation is central to perceiving how Dobzhansky, and those who followed him, were perhaps unknowingly the first to establish credible bridge points linking ethics with biology.

## Foreword

*The Evolution of Ethics* attempts to construct a conceptual bridge between biology and human behavior by examining the cultural and biological feedback system that inspires the evolution of social rules. In theory, at the heart of developing ethical systems is a cybernetic process that arises between the interaction of biology and culture using the informational feedback between the two to further human adaptation and survival.

Living systems of all descriptions have evolved both cooperatively and competitively for more

than a billion years. Since biological systems have been intertwined for so long, a change in one system can cause a change in many others. In theory, these changes disperse through the environment like waves generated by an object hitting the surface of a quiet pond. Biological interrelatedness extends to human social systems as well, thereby imposing limits upon what people can reasonably do. Human beings are not at liberty to do as they wish because personal actions often inspire consequent reactions and sometimes overreactions that need regulating by way of laws and morals. This regulation affects individuals as well as large groups. An example of this might be seen in the careless use of fluorocarbons that thin the ozone layer, allowing harmful radiation to reach the earth and threaten the survival of all humans and organisms. Such a dangerous situation forces humans to choose between doing what they freely wish to do (risking pain, suffering, and death in the process) or setting limits on their behavior. The demonstrable effects of pollutants on people appears to force the formation of laws and enlightened moral attitudes that discourage the practice of releasing dangerous chemicals into the atmosphere. These kinds of laws cannot be said to have emerged from some abstract philosophical theory of right and wrong. Instead, they appear to have evolved from real life situations in which human beings are forced to adapt to threatening circumstances in order to maintain their health and quality of life.

Morality is sometimes viewed in a negative context because it is associated with self-serving political and religious causes. In spite of this fact, the imposition of rules in the main does not lower the quality of human life. To the contrary, carefully laid out rules have the greater potential to improve its quality. Broadly imposing guidelines through the promotion of statutory laws as well as moral, manner, and customary rule systems, redirects social priorities in an efficient way. In turn, there is an increase in societal organization and efficiency that enhances cultural peace, prosperity, and productivity. Social evolution in this light acts as an extension of the same biological processes observed in lower organisms where it appears that tight hierarchical organization and efficient survival strategies further the life of many types of organisms.

In theory, nature provides human beings with the means to motivate themselves and create great things by giving them passion and sensitivity. At the same time, it appears to endow them with an extraordinary intelligence to limit the excesses of their emotions. Unfortunately, while people strive to be rational, their actions are still governed by strong emotions. When they respond to emotions that are a derivative of physiology, behavioral excesses inspiring a host of problems manifest themselves. When emotions run high, there needs to be some mechanism present to keep passions from getting out of hand and causing harm to people or the societies they have spent so many years building. In much the same way that circuit breakers in a house prevent an overloaded circuit from melting the wires and causing a fire, moral restraints naturally arise and intervene as reasons (or a reason) to break up the vicious circles of conflict that passions can produce. The emergence of moral laws and sentiments, shaping the course of history, is therefore an extension of human physiology that stabilizes relationships so that people grow and prosper instead of conflicting to the point of extinction.

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