# Preface to Men, Ideas, & Politics by Peter Drucker

Do the essays in this volume have anything in common except the author?

At first sight they may look like random scatter without underlying theme or unifying thesis. An essay on "The New Markets," which treats the financial fads and follies of the 1960's as symptoms of structural change in economy and society, may seem a strange bedfellow for an essay on Kierkegaard, surely the least "market-oriented" thinker of the modern West.

An evocation of Henry Ford as the "Last Populist," and simultaneously the fulfillment and the denial of the nineteenth century's agrarian and Jeffersonian dreams, might seem very far away from the internal stresses of the Japanese "economic miracle" or the pathos and bathos of "This Romantic Generation," today's educated young people.

Yet all these pieces, despite the diversity of their topics, have a common subject matter and a common theme.

They are all essays in what I would call "political (or social) ecology."

This term is not to be found in any university catalogue.

But the only thing that is "new" about political ecology is the name. As a subject matter and human concern, it can boast ancient lineage, going back all the way to Herodotus and Thucydides.

It counts among its practitioners such eminent names as de Tocqueville and Walter Bagehot.

Its charter is Aristotle’s famous definition of man as “zoon politikon,” that is, social and political animal.

As Aristotle knew (though many who quote him do not), this implies that society, polity, and economy though man’s creations, are nature to man, who cannot be understood apart from and out of them

It also implies that society, polity and economy are a genuine environment, a genuine whole, a true “system,” to use the fashionable term, in which everything relates to everything else and in which men [people], ideas, institutions, and actions must always be seen together in order to be seen at all, let alone to be understood.

Political ecologists are uncomfortable people to have around. Their very trade makes them defy conventional classifications, whether of politics, of the market place, or of academia. Was de Tocqueville, for instance, a “liberal” or a “conservative”? What about Bagehot?

“Political ecologists” emphasize that every achievement exacts a price and, to the scandal of good “liberals”,” talk of “risks” or “trade-offs,” rather than of “progress.” But they also know that the man-made environment of society, polity, and economics, like the environment of nature itself, knows no balance except dynamic disequilibrium.

Political ecologists therefore emphasize that the way to conserve is purposeful innovation—and that hardly appeals to the "conservative."

Political ecologists believe that the **traditional disciplines define fairly narrow and limited tools rather than meaningful and self-contained areas of knowledge, action, and events—in the same way in which the ecologists of the natural environment know that swamp or the desert is the reality and ornithology, botany, and geology only special-purpose tools**.

Political ecologists therefore rarely stay put. It would be difficult to say, I submit, **which of chapters** in this volume are "management," which "government" or "political theory," which "history" or "economics."

The task determines the tools to be used: but this has never been the approach of academia. Students of man's various social dimensions—government, society, economy, institutions—traditionally assume their subject matter to be accessible to full rational understanding. Indeed, they aim at finding "laws" capable of scientific proof. Human action, however, they tend to treat as nonrational, that is, as determined by outside forces, such as their 'laws."

The political ecologist, by contrast, assumes that **his subject matter is far too complex ever to be fully understood**—just as his counterpart, the natural ecologist, assumes this in respect to the natural environment. But precisely for this reason the political ecologist will demand—like his counterpart in the natural sciences—responsible actions from man and accountability of the individual for the consequences, intended or otherwise, of his actions.

An earlier volume of essays of mine, Technology, Management & Society (published in 1970), centered on what used to be called "the material civilization": business enterprise, its structure, its management, and its tools; technology and its history, and so on. The present volume is more concerned with economic, political, and social processes:

- the early diagnosis of fundamental social and economic change;
- the relationship between thought—economic, political, or social—and actions;
- the things that work and don't work in certain traditions, whether those of America or those of Japan; or
- the conditions for effective leadership in the complex structures of industrial society and giant government.

But in the last analysis, the present essays, and those in the earlier volume, have the **same objective**.

**They aim at an understanding of the specific natural environment of man, his "political ecology," as a prerequisite to effective and responsible action, as an executive, as a policy-maker, as a teacher, and as a citizen**.

Not one reader, I am reasonably sure, will agree with every essay; indeed, I expect some readers to disagree with all of them. But then I long ago learned that the most serious mistakes are not being made as a result of wrong answers. **The truly dangerous thing: is asking the wrong questions**; I do hope that readers, whether executives in a business or administrators in a government agency, parents or their children, policy-makers or citizens, teachers or students, will agree that this volume addresses itself to right questions. And even the reader who disagrees heatedly with the author's prejudices, opinions, and conclusions will, I hope, find these essays enjoyable reading.

# Kierkegaard, Soren {kyair'-kuh-gawr, sur'-en}

Soren Aabye Kierkegaard, b. May 5, 1813, d. Nov. 11, 1855, was a Danish philosopher and religious thinker whose reaction against the depersonalization of society and against the established church of Denmark took the form of brilliant literary and philosophical essays. He is regarded by philosophers today as a precursor of EXISTENTIALISM, although not all existentialists are directly influenced by him.

Kierkegaard studied philosophy and theology at the University of Copenhagen and received a master's degree in 1840. The next year he shocked Copenhagen's society by breaking his engagement to Regine Olsen, the daughter of a treasury official. Although he broke the engagement for fear that he and his fiancee might lack common philosophic interests, he gave the impression of acting out of a brutal and indifferent selfishness in order to make the breach definitive. Thereafter he lived a life of seclusion, devoted to writing. The impact on his career of the broken engagement, as well as his austere Lutheran upbringing and his melancholia, is evident in virtually everything he wrote thereafter.

Kierkegaard cultivated paradox and irony throughout his life, so that the problem of what he really thought or felt is difficult to determine. For example, he adopted the curious device of signing his books—Either/Or (1843; Eng. trans., 1944), Philosophical Fragments (1844; Eng. trans., 1936), Concluding Unscientific Postscript (1846; Eng. trans., 1941), and many others—with pseudonyms to prevent his readers from thinking that the incomplete points of view contained in these books constituted the total point of view that would characterize a fully religious person—or even the point of view he was trying to adopt in his own life.

Kierkegaard's unifying theme was that there are three spheres of existence—the aesthetic, the ethical, and the religious—in constant tension. He found the first of these, personal aesthetic enjoyment, in the fickle search for pleasure that is essentially egoistic. The second, the ethical sphere, is not egoistic; rather it is an impersonal ideal, a law based on reason rather than personal preference and convenience. In this stage, life is not a series of separate moments of pleasure but a long-range project to be organized according to rational principles. These principles include not only the rules of ultimate self-interest but also the abstract principles of morality that describe what an individual ought to do. In the third stage, that of true religious choice, no automatic, rational decision procedure can be employed, but rather a "leap of faith" provides the grounds for decision. Thus in Fear and Trembling (1843; Eng. trans., 1941) Kierkegaard retold the story of Abraham's dilemma in such a way as to present the two alternatives of an abstract ethical universal (the abstract rule that one should not kill one's child) and a concrete religious commitment (the unjustifiable but undeniable command of God to ABRAHAM that he should slay ISAAC).

For Kierkegaard, the highest level of human life consists of recognizing the need for RELIGION as a subjective commitment to truth, as opposed to the Hegelian philosophy of pure thought. Kierkegaard attacked what he considered to be the sterile METAPHYSICS of G.W.F. HEGEL, who attempted to systematize the whole of existence and create an objective theory of knowledge. Kierkegaard's often repeated statement, "truth is subjectivity," should not be understood in the sense of a shallow individualism. Rather, it links truth with the subject instead of with its object, making the full communication of truth to other subjects impossible. Kierkegaard drew the only logical conclusion from his principle—that it is impossible to establish an objective system of doctrinal truths.

Although few 19th-century thinkers have surpassed Kierkegaard's influence on 20th-century thought, there is no "Kierkegaardian school" of philosophy, theology, or literary criticism. This is due largely to the fact that he did not develop an all-embracing system, but instead deliberately developed his ideas from several often incompatible points of view at the same time. The lack of an explicit following, however, is itself a confirmation of Kierkegaard's philosophy, as he insisted that the individual was the repository of truth. In fact, he requested as his own epitaph the designation "That individual."

## Existentialism

Existentialism is the popular name of a philosophical attitude primarily associated with the 20th-century thinker Jean Paul SARTRE, but with a history that goes back to the 19th-century Danish philosopher Soren KIERKEGAARD. The name itself was coined by Sartre, although the expression "existence philosophy" had been used earlier by Karl JASPARS, who belonged to the same tradition. Existentialists have differed widely from one another on many basic philosophical issues, but they have shared a concern for human freedom and personal responsibility and have stressed the importance of the individual's need to make choices. Others who have helped to shape the existentialist point of view are Friedrich NIETZSCHE, Martin

HEIDEGGER, Albert CAMUS, and Maurice MERLEAU-PONTY.

Kierkegaard is the chief exponent of religious existentialism, a very personal approach to religion that emphasizes faith and commitment, and tends to minimize theology and the place of reason in religion. Kierkegaard attacked the theologians of his day for attempting to show that Christianity was a thoroughly rational religion, claiming instead that faith is important precisely because it is irrational, and even absurd. The important thing, he argued, is not the objective question of whether God in fact exists, but the subjective truth of one's own commitment in the face of an objective uncertainty.

Although Kierkegaard's work inspired an influential school of 20th-century religious existentialists (including Paul TILLICH, Martin BUBER, Karl BARTH, and Gabriel MARCEL), the existentialist attitude is perhaps more often associated with atheistic thinkers to whom religious belief seems like an act of cowardice, or, as Camus calls it, "philosophical suicide." Nietzsche's attack on Christianity and Christian morality is based on his suspicion that these are in fact crutches for weakness, instruments for the weak and mediocre to use against the strong and self-reliant. They are products of what he calls "the herd," the legacy of a slave morality that prefers safety and security to personal excellence and honor. But as opposed as Nietzsche may be to Kierkegaard (neither one ever read the other), these two 19th-century existentialists shared one essential line of approach. They both attacked the Christianity of their day as hypocritical, insisting that it was an expression of the herd instinct and personal weakness. That Kierkegaard urged a renewal of the Christian faith while Nietzsche wished to eliminate it is perhaps less significant from a philosophical standpoint than their common insistence on the importance of individual passion against the calm public pronouncements of reason and conformity.

Twentieth-century existentialism is largely defined—in its form if not its expression—by the movement known as PHENOMENOLOGY, originated by Edmund HUSSERL and pursued into the existential realm by his student Martin Heidegger. Most of Husserl's own philosophy was restricted to abstract and impersonal questions in the theory of knowledge and the foundations of mathematics. His method, simply stated, was to find and examine the essential structures of experience, with the aim of establishing the universal truths necessary to basic consciousness. Heidegger borrowed the phenomenological method and applied it to more personal problems—questions about how human beings should live, what they are, and the meaning of life and death. His work BEING AND TIME (1927;

Eng. trans. 1962) is nominally concerned with metaphysics, but in fact it is a radical reassessment of what it means to exist as a human being. Heidegger rejects the classical Cartesian concept of consciousness (I think, therefore I am) and replaces it with the neologism “Dasein,” a word that literally means “being there.” In his view, there is no separation of mind and matter, no consciousness separate from the world. One finds oneself in the world “abandoned.” The problem is to find out what to do with oneself or, as Nietzsche said, how to become what one is. Phenomenology, for Heidegger, becomes a method for “disclosing one’s being,” a way of seeing what is essential to oneself.

Sartre combined existentialism with Marxism. Following both Husserl and Heidegger, he used the phenomenological method to defend his central thesis that human beings are essentially free, free to choose (though not free not to choose) and free to negate the given features of the world. One may be cowardly or shy, but one can always resolve to change. One may be born Jewish or black, French or crippled; it is an open question what one will make of oneself, whether these will be handicaps or advantages, challenges to be overcome or excuses to do nothing. Camus borrowed from Heidegger the sense of being abandoned in the world, and he shared with Sartre the sense that the world does not give meaning to individuals. But whereas Sartre joined Heidegger in insisting that one must make meaning for oneself, Camus concluded that the world is “absurd,” a term that has (wrongly) come to represent the whole of existentialist thinking. For Sartre, however, the heart of existentialism is not gloom or hopelessness, but a renewed confidence in the significance of being human.

When Sartre died in 1980, existentialism as such died with him, but the existentialist emphasis on the individual, the personal, and the importance of freedom and responsibility continue to represent an essential ingredient of philosophical thinking.

## Pathos

1. A quality, as of an experience or a work of art, that arouses feelings of pity, sympathy, tenderness, or sorrow.

2. The feeling, as of sympathy or pity, so aroused.

## Bathos

1.a. An abrupt, unintended transition in style from the exalted to the commonplace, producing a ludicrous effect. b. An anticlimax.

2.a. Insincere or grossly sentimental pathos. b. Banality; triteness.

# Herodotus

{huh-rahd'-uh-tuhs}

Herodotus was a Greek writer of the 5th century BC who wrote the first Western, historical work in the conventional sense of the term HISTORY. He is therefore known as the father of history. Writers before him, such as Hecataeus (c.500 BC), wrote purely geographical treatises or, if they delved into history, limited themselves to the quasi-mythical events of heroic times. Herodotus basically ignored this shadowy past. His theme, instead, was the enmity that developed between East and West from the time of Croesus of Lydia (c.550) to the Persian War of 480-79 BC.

Herodotus's History contains valuable and lively discussions of the customs, geography, and history of Mediterranean peoples, particularly the Egyptians. In this respect he shows the influence of his great predecessor Hecataeus. But his work, written with wit and dramatic flair, is also a rich source for the history of 6th-century Greece. Its centerpiece—his account of the Persian Wars, including the Battle of Marathon and Xerxes I's defeat by the Greeks—is a detailed narrative that remains the basis of modern reconstructions.

Herodotus possessed a philosophical mind. Convinced that pride (hybris) goes before a fall, he wrote his history in part to show that evil deeds will be punished. But he was also persuaded of the general instability of fortune for innocent and guilty alike: unchecked prosperity could not endure even for such well-meaning men as Croesus of Lydia or Polycrates of Samos. Thus he records that Solon told Croesus: “Count no man happy until he is dead.” Herodotus observed that only the gods enjoy continuous happiness.

Little is known with certainty about Herodotus’s life. He was a Dorian, born in Halicarnassus in Anatolia not long after 480 BC; the traditional date is 484. His work proves that he traveled widely throughout the Mediterranean. He probably died in Thuria, a Greek city in southern Italy, in the late 420s.

## Thucydides {thoo-sid'-i-deez}

Thucydides, c.460-c.400 BC, the Athenian historian of the PELOPONNESIAN WAR, is considered by many to be the greatest of the ancient Greek historians. His work had a profound influence on the development of historical writing. Although he was a relative of the great soldier and statesman CIMON, Thucydides was also an admirer of Cimon's political opponent, PERICLES. Thucydides served as general in 424 but was banished from Athens in that year for his failure to protect Amphipolis from the Spartans. He returned from exile after the war ended in 404.

Thucydides began writing his HISTORY OF THE PELOPONNESIAN WAR in 431 when the great war broke out. He believed that the war would prove epochal and that his account would possess permanent value because such significant conflicts were bound to occur in future epochs "so long as human nature remained the same." The speeches he inserted into his history, brilliantly conceived and written, probe deeply into human motivation and explain the policy of states in terms of human psychology.

Thucydides, the first Greek to write contemporary history, was deeply indebted to HERODOTUS for his conception of the fundamental importance of historical writing. Unlike Herodotus, however, who considered it his duty to repeat what people said without necessarily subscribing to it, Thucydides made every effort to authenticate the facts he reported, and he shows unusual sophistication in his awareness of the way that witnesses often misremember what they have seen.

Although an admirer of Periclean democracy, Thucydides was not a democratic ideologue. He approved of the curtailment of the democracy in 411 and even found the oligarchic constitution of Chios admirable. In statesmen he valued above all intelligence and foresight, qualities possessed by his heroes Themistocles and Pericles. Generally, his History is remarkable for its objectivity, although his treatment of Sparta and Athens shows that he greatly admired the qualities attributed to the Athenians—inventiveness, daring, and aggressiveness. The History is incomplete, ending abruptly with Thucydides’ narrative of the events of 411 BC.

# Tocqueville, Alexis de {tohk-veel'}

Alexis de Tocqueville, b. July 19, 1805, d. Apr. 16, 1859, was a French politician and writer best known for his classic study of the United States, Democracy in America (2 vols., 1835, 1840; Eng. trans., 2 vols., 1835-40). A member of an aristocratic family, Tocqueville joined the government service as a lawyer and went (1831) to the United States to study the American penal system. Profoundly affected by his experience, he returned (1832) to France and while serving in the Chamber of Deputies completed Democracy in America. In 1849, Tocqueville served as minister of foreign affairs. He later wrote The Old Regime and the French Revolution (1856; Eng. trans., 1856), an introductory volume to a planned history of the French Revolution.

In Democracy in America, Tocqueville affirmed his commitment to human freedoms and helped establish the European view of the United States as a land of unlimited opportunity, equality, and political wisdom. The essays that form the book appraise the American experience from the viewpoint of an enlightened European whose own society was still constricted by aristocratic privilege. Tocqueville felt that the old aristocratic institutions of Europe would inevitably give way to democracy and social equality, and he held up the American system as a successful model. Tocqueville's praise for the young country's ideals was not unqualified, however. He felt that democracy was an inevitable political force; at the same time, however, he feared that virtues he valued—freedom, civic participation, taste, creativity—would be imperiled by "the tyranny of the majority," individualism, and other democratic despotisms. Tocqueville believed that America's egalitarian spirit and democratic institutions "awaken and foster a passion for equality which they can never entirely satisfy."

Reviewed by James T. Schleifer

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# Bagehot, Walter

{baj'-uht}

Walter Bagehot, b. Feb. 3, 1826, d. Mar. 24, 1877, was an English social scientist and the editor of The ECONOMIST from 1860 until his death. He joined the family banking business in 1852 and went to The Economist six years later. His knowledge of the money market as it functioned between 1850 and 1870 formed the basis of his influential book Lombard Street (1873). Bagehot also wrote The English Constitution (1867), which depicted the daily workings of British government; Physics and Politics (1869), an application of Darwinism to political theory; and Economic Studies and Literary Studies, which appeared after his death.

# Aristotle

{ar-is-taht'-uhl}

With the possible exception of Plato, Aristotle, 384-322 BC, is the most influential philosopher in the history of Western thought. Logic into the present century was basically Aristotelian LOGIC. The study of the natural sciences was dominated by Aristotle until early modern times, and modern physics was developed in reaction to the Aristotelian tradition. His metaphysics continues to be the subject of philosophical debate, although his ETHICS now constitutes that part of his philosophy which appeals most to contemporary philosophers. Aristotle's influence extends far beyond philosophy, however. For example, Aristotle was the founder of BIOLOGY; Charles DARWIN regarded him as the most important contributor to the subject. Aristotle's POETICS, the first formal work of literary criticism (see CRITICISM, LITERARY), had a strong influence on the theory and practice of modern classical drama. Aristotle's immense influence is due primarily to the fact that he seemed to offer an all-encompassing system, which, although lacking in certain respects, was as a whole formidably imposing and unrivaled in its comprehensiveness.

## LIFE

Aristotle was born in 384 BC in Stagira in northern Greece. His father, Nicomachus, was a physician with close connections to the Macedonian court, connections that were maintained by Aristotle and by his school even after his death. It may have been his father's influence that gave Aristotle a strong interest in anatomy and the structure of living things in general, and that helped him develop a remarkable talent for observation.

In 367, Aristotle went to Athens to join PLATO's Academy, first as a student, then as a teacher. Plato had gathered around him a group of outstanding men who worked in a wide variety of subjects, ranging from medicine and biology to mathematics and astronomy. They shared no common doctrine but were united by the systematic effort to organize human knowledge on a firm theoretical basis and expand it in all directions. This effort, more than anything else, characterizes Aristotle's own work.

It was also part of the Academy's program to train young men for a political career and to provide advice to rulers. Thus, after Plato's death, Aristotle joined (347) the court of Hermias of Atarneus, and later went (343) to the court of Philip II of Macedonia, where he became tutor to the young Alexander the Great. In 335, Aristotle returned to Athens to found his own school, the Lyceum, or Peripatus. Whereas the Academy had become rather narrow in its interests since Plato's death, the Peripatus under Aristotle and his successor, THEOPHRASTUS, pursued a wider range of subjects than the Academy ever had. In particular, prominence was given to the detailed study of nature. After the death of Alexander the Great in 323, anti-Macedonian feeling in Athens rose, and Aristotle retired to Chalcis, where he died the following year.

### *WRITINGS*

All Aristotle's writings for a larger audience, mainly dialogues, have been lost except for some fragments. What remains are treatises apparently meant for use within the school. These form the so-called Corpus Aristotelicum. In addition, there survives a mutilated version of his Constitution of Athens, some letters of doubtful authenticity, and some poems, including an elegy on Plato.

The Corpus Aristotelicum can be traced back to the 2d century AD. An earlier edition is said to have been prepared by Andronicus of Rhodes in the 1st century BC, but this is doubtful. In what form Aristotle's treatises were available before the 1st century BC is a matter of controversy. The texts of the treatises raise serious problems. Some of them so clearly contain later thought and language that they cannot possibly be by

Aristotle; others are of doubtful authenticity. Even such clearly authentic writings as the Metaphysics show the work of later editors. Many texts show signs of addition and revision, and it is difficult to determine which of these were made by Aristotle himself. Attempts have been made—without much success—to reconstruct the original form of a text, to distinguish the different levels of revision it has undergone, and to associate these levels with phases in Aristotle's thought.

Underlying the order of the treatises in the Corpus is the traditional division of philosophy into logic, physics, and ethics. Two sets of Aristotelian writings do not easily fit this scheme, the Metaphysics, and the Rhetoric and the Poetics. These are appended to the physical and the ethical writings, respectively. Thus the following classification of Aristotle's writings is observed: (1) Logical writings—Categories, On Interpretation, Prior and Posterior Analytics, Topics, Sophistical Refutations; (2) Physical writings—Physics, On Generation and Corruption, On the Heavens, Meteorologica, On the Soul, Parva Naturalia, History of Animals, Parts of Animals, Generation of Animals, Motion of Animals; (3) Metaphysics; (4) Ethical writings—Nicomachean Ethics, Eudemean Ethics, Magna Moralia, Politics; (5) Rhetoric, Poetics.

# *THOUGHT*

## Logic

Logic, the theory of formal truth and validity, originated in reflections on the practice of DIALECTIC, the kind of debate found in Plato's dialogues. Dialogue was regarded as the appropriate form for philosophical arguments, and hence the acquisition of dialectical skill was regarded as crucial for students of philosophy. Aristotle's first great achievement was probably a handbook, now entitled Topics and Sophistical Refutations, in which he provided the first general analysis of dialectic and formulated rules for success in this kind of argument. Clearly, dialectical argument does not by itself lead either to incontestably true conclusions or to scientific knowledge. Dialectical method aims to ensure that premises are plausible and that arguments are valid. In the Prior and Posterior Analytics Aristotle tried to work out which kind of premises are needed to gain scientific knowledge and which formal conditions an argument must satisfy to be incontestably valid. According to the Posterior Analytics, the ultimate premises or principles of a science are necessary truths. Human knowledge of these truths is based on experience; it is not itself a matter of experience, however, but rather of reason. When a subject is sufficiently familiar, its governing principles become evident to reason. Deduction from these principles provides not only the knowledge that something is true, but also the reasons why it is true. For Aristotle, both are required for scientific knowledge.

## Natural Sciences

The natural sciences are concerned with natural objects that are characterized by the fact that they are subject to change. Change is therefore the basic phenomenon with which physics has to deal. Hence Aristotle's work in physics is devoted to an analysis of change and a discussion of its presuppositions. According to Aristotle every change involves three factors: (1) a feature or form that exists as a result of change; (2) the earlier absence of this form; and (3) the matter that was always there but which, as a result of the change, is now characterized by the form in question. In the case of a statue the three factors are the form of the statue; its previous lack of form; and the material from which it was made.

Aristotle ties the notions of matter and form to other notions. Thus he explains that if matter becomes an F the matter is F potentially (that is, is capable of being an F), whereas the form is the actuality in virtue of which it is now an actual F. Matter and form are the material and the formal cause, respectively, of what comes to be. A cause is a factor, and a true statement about that factor helps to explain the being of what is caused. Aristotle distinguishes four kinds of causes. If a house comes into being, its efficient cause is the builder, its formal cause the structure by virtue of which it is a house, its material cause the matter that has received this structure, and its final cause the end or purpose for which houses exist, namely the protection of people and property. Because motion, due to its continuity, has no end, presupposes a location, seems to presuppose a void, and takes time, Aristotle also discusses these notions in detail. He denies the existence of a void and considers the continuity of motion at length. Finally, he argues that there would be no motion at all unless there is first a force of movement that is itself unmoved—namely God.

The form of an object helps to account for its behavior. Aristotle calls the forms of living things "souls," which are of three kinds: vegetative (plants), sensitive (animals), or rational (human beings). Because Aristotle believed that the soul is merely a set of defining features, he did not regard the body and the soul as two separate entities that mysteriously combine to form an organism. Hence it is not clear what he had in mind when he described an active intellect whose activity is presupposed by the activity of the human mind and that is supposed to be able to exist independently of the body.

Most of Aristotle's work in biology was devoted to zoology. In Aristotle's study of biology the doctrine of TELEOLOGY is particularly prominent. This doctrine, that the form of natural objects is determined by their final ends or purposes, has frequently been misunderstood as an assertion that there is a universal design in nature. Aristotle simply insists that the structure and the behavior of things also has to be understood as contributing to their individual being and function.

Aristotle's ideal of a science as a deductive system based on evident axioms had a considerable influence on the history of science. In the Prior Analytics he examines the conditions an argument must satisfy in order to be incontestably valid. Because he is primarily concerned with the arguments whose propositions are scientific, and because he only regards general categorical propositions as scientific, his theory applies only to a small class of logically valid arguments, the so-called categorical SYLLOGISMS. Aristotle proceeds by specifying certain parts of an argument, or moods, that axiomatically count as valid. Any argument that can be transformed into an axiomatically valid argument must also be valid.

### Metaphysics

Whereas sciences deal with particular kinds of beings, metaphysics is concerned with beings as such. According to Aristotle there is no such thing as mere being; to be is always to be a SUBSTANCE or object, a quantity, a quality, or a member of some other basic category. Substances are prior to nonsubstances because qualities or quantities are determined by substances. Such substances as God may, however, lack quantities and qualities. Hence an account of beings is, in the first place, an account of substances. Initially, it appears that substances are objects, like the everyday objects, but closer consideration shows that the primary individuals are the forms or essences of particular objects. To understand these it is necessary to realize that they are a particular kind of substance—embodied substantial forms. To understand substance, therefore, it is necessary to consider immaterial substantial forms, ultimately God. Only then can humans understand what it is to be a substance, and what it is to exist. Ultimately, then, the study of metaphysics becomes in part theological.

## Ethics

The end, or good, of humankind is not merely to live, but to lead a good, flourishing life that manifests the rational nature of humanity and thus satisfies human needs. The pursuit of happiness is a search for the good life, which is composed of virtuous actions. Aristotle offers no simple definition of goodness, but he advises that virtue is a mean, lying between extremes. Generosity, for example, consists in giving neither too little nor too much. Aristotle also describes intellectual virtue and moral virtue, which correspond to the rational and the irrational parts of the soul. The most important of the intellectual virtues are theoretical and practical wisdom. To the extent that the irrational part of a person's soul is subject to reason and has reasonable desires and feelings, that person is characterized by such moral virtues as justice, courage, and magnanimity. The effort to perform virtuous acts creates the desire to do the right thing for its own sake and also cultivates practical wisdom. The highest, and therefore most satisfying, form of rational existence is a life of contemplation—the exercise of the theoretical wisdom. Because human beings are not purely rational, however, a flourishing, happy human life demands the exercise of both the intellectual and the moral virtues.

Humans are by nature gregarious and are disposed to form political associations to fulfill their desires. The aim of the state is the good life of its citizens. In the Politics, Aristotle evaluates different forms of government in the light of these assumptions. His views are profoundly influenced by the belief that only certain people are endowed with the capacity to lead the good life and undertake the responsibilities of citizens, and that fewer still are capable of holding public office. Thus a Greek DEMOCRACY (which was nonrepresentational and in which offices rotated) imposed severe limitations on rights to citizenship. Aristotle believed that a state should be organized in such a way as to encourage that part of the population which is capable of the good life to practice moral and theoretical virtue.

### Rhetoric and Poetics

In their competition for bright, ambitious young men, the Greek schools of philosophy were not willing to allow specialists, such as Isocrates, to monopolize instruction in RHETORIC AND ORATORY. Aristotle in his Rhetoric makes use of traditional rhetorical methods, but he deals with the subject in a more systematic and theoretical fashion. Priority is given to the orator's ability to invent arguments, to see what is plausible in a given case. Only then does Aristotle turn to the strategy and verbal form of the plea.

In the Poetics, Aristotle defends poetry against Plato's criticisms. Whereas Plato had spoken of the imitative character of the arts, Aristotle regarded the poet's creations as imaginative, ideal truths closer to reality than the records of historiography. He also rejected the view that poetry should be judged by the morality of what it depicts. The interpretation of Aristotle's observation in the Poetics, that tragic drama, by engendering pity and fear, can purge the emotions, has always been disputed.

## *ARISTOTELIAN TRADITION*

During the Hellenistic period the Aristotelian tradition was continued by the Peripatetic school (see PERIPATETICS). Because of the eclecticism and neoclassicism that arose during the 1st century BC, Aristotle became an authority for all philosophers, especially in logic and in natural sciences. The leading philosophy from the 3d century AD onward, however, came to be Platonism, which better suited the religious temperament of the age. As a result theologians, whether in western Europe, in Byzantium, or in the Islamic states, tended to be Platonists and to view pure Aristotelianism, as represented by the Arab commentator AVERROES, for example, as heretical. Nevertheless, the history of scholastic philosophy (see SCHOLASTICISM) is primarily the history of the assimilation of Aristotelianism despite the opposition of theologians. It was because of the close association of Aristotelianism and scholasticism that Aristotelianism fell into disrepute in early modern times. During the 19th century, however, Aristotelianism was revived in reaction to Hegelianism.