

Life and Death

INTRODUCTION

MEN have divided the totality of things in various ways. The three most fundamental divisions rest on the distinction between the natural and the supernatural, between the material and the spiritual, and between the lifeless and the living.

The same kind of basic question is raised by each of these divisions, and given opposite answers in the tradition of the great books. The question is not always formulated in the same way. It may be a question about the existence of the supernatural order or of incorporeal beings. It may be a problem of whether the terms of the division represent a real duality or merely different aspects of one and the same whole. Are God and nature one or are they radically distinct? Is spirituality merely one expression of bodily existence, or are there two worlds, a world of bodies and a world of spirits?

These issues are considered in the chapters on GOD, NATURE, ANGEL, and MATTER, as well as in the chapter on BEING. The issue raised by the third great division is one of the central topics in this chapter. That issue concerns the difference between the living and the nonliving. There is no question here about whether, in the order of nature, living things exist. The fact of life is not denied, at least not as a matter of observation. On the surface there certainly appears to be a striking difference between the living tree and the stone, or between the animal which a moment ago was alive and is now dead.

But how this difference is to be understood is the question. Does it signify an absolute break, a discontinuity, between the world of living bodies and the domain of inanimate things? Or is the continuity of nature pre-

served across the line which divides inorganic and organic matter? Is the difference between the nonliving and the living (or the living and the dead) one of kind or of degree?

Those who answer that it is a difference in kind usually formulate a definition of life which draws a sharp line, on one side of which are the things that have the indispensable properties of life, while on the other side are things totally lacking in these properties. The critical point here turns on whether vitality is present in some degree or totally absent. The definition of life may not always be the same. It may not always, for example, postulate the soul as the principle in all living things, or involve the same conception of soul in relation to living organisms. But when life is defined as an essential characteristic of some natures, the definition implies the existence of natures which are totally lacking in the properties essential to life. It also implies the impossibility of intermediate links between the lowest form of life and the most complex of the inorganic substances.

The opposite answer that there is only a difference in degree between the inanimate and the animate, affirms the continuity of nature across the gap between things which appear lifeless and those which seem to be alive. All bodies have the same fundamental properties, though not in the same magnitude. But here there is a further question. It can be asked whether those properties are the powers or functions commonly associated with the appearance of being alive, such as growth, reproduction, sensitivity, desire, locomotion; or whether they are the mechanical properties of matter in motion—properties which vary only with the degrees of complexity in the organization of matter.

According to the doctrine which is sometimes called "animism" and sometimes "panpsychism," everything is alive, every body is besouled, though at the lower end of the scale the signs of vitality remain hidden from ordinary observation. Although this theory is usually attributed to a primitive view of nature, it appears in a subtle form in certain philosophical developments which make soul or mind a principle as universal as matter. "There is one common substance," says Marcus Aurelius, "though it is distributed among countless bodies which have their several qualities. There is one soul, though it is distributed among infinite natures and individual circumstances."

Whitehead's organic theory of matter may be viewed as a more recent incarnation of this philosophy. According to this theory, the elementary particles of matter—electrons, atoms, and molecules—share many of the qualities often thought to be distinctive of living organisms. Like living organisms, they are not merely influenced by their environment; they also influence it and adapt to it. "Science," Whitehead writes, "is becoming the study of organisms. Biology is the study of the larger organisms; whereas physics is the study of the smaller organisms."

The doctrine which in modern times is called "mechanism" conceives the continuity of nature in terms of the universality of purely mechanical principles. It reduces all phenomena to the interaction of moving parts or particles. No new principle is needed to explain the phenomena of life. The laws of physics and chemistry suffice. Biophysics and biochemistry simply deal with the mechanics of more complex material systems. The apparent differences in function between "living" and "nonliving" things represent the same functions. They are altered only in *appearance* by the more complex organization of the matter which is called "living."

THE CONTROVERSY over mechanistic principles in the analysis of life arose with great explicitness in the latter part of the 19th century and continues to our own day. The chief opponents of the mechanists are those who at one

time called themselves "vitalists" to signify their insistence upon an essential difference between vital and mechanical phenomena. The work of Jacques Loeb can be taken to represent the mechanistic side of this controversy; the writings of Bergson, J. S. Haldane, Whitehead, the vitalist position.

Those who regard the realm of living things as a distinct domain in nature also think that the study of living things has special concepts, principles, and methods as different from those of physics and chemistry as the objects studied are distinct.

Biology is a science of ancient origin. The Hippocratic collection of writings on health and disease, the extensive biological researches of Aristotle, the work of Galen, represent more than a bare beginning of the science. The ancient classification of vital functions establishes the terms of biological analysis. Ideas which have come to seem obvious because of traditional acceptance were once great discoveries; for example, that all living bodies nourish themselves, grow, and reproduce; that these are the minimal, not the maximal, functions of organic matter; that there is a regular cycle of growth and decay in the normal life span which is itself different for different types of organisms; that in the dynamic equilibrium between the living organism and its physical environment, the organism actively maintains itself through a certain balance of exchanges in the biological economy, of which breathing is a prime example.

The great books of biological science from Aristotle to Harvey seem to be of one mind on the point that living matter possesses distinctive powers and performs functions which are not present *in any degree* in the realm of the inert or inorganic. For the most part they reflect the theory that the living body possesses a soul which is the principle of its vitality and the source of the vital powers embodied in its various organs.

In ancient and medieval theory, the soul is not conceived as belonging peculiarly to man; it is not identified with mind or with the intellectual faculties. The word "animal" derives from the Latin name for soul—the principle of animation. It is true that Galen distinguishes

between what he calls the "natural" and the "psychic" faculties. The latter for him are the powers of sensitivity, desire, and locomotion. Yet his analysis of the vegetative powers of nutrition, growth, and reproduction which are common to plants and animals squares with Aristotle's conception of the vegetative soul.

"What has soul in it," Aristotle writes, "differs from what has not, in that the former displays life. Now this word has more than one sense . . . Living, that is, may mean thinking or perception or local movement and rest, or movement in the sense of nutrition, decay, and growth. Hence we think of plants also as living, for they are observed to possess in themselves an originative power through which they increase and decrease in all spatial directions. This power of self-nutrition . . . is the originative power, the possession of which leads us to speak of things as *living*."

IN THE GREAT BOOKS the opposite position with respect to the living and nonliving seems to appear for the first time with Descartes. It might be supposed that Lucretius, since he denies the soul as an immaterial principle, would also tend to reject anything except a difference in degree between animate and inanimate bodies. But this is not the case. According to Lucretius, living things are not merely more complex combinations of atoms and void. Their constitution includes a special type of soul-atom, whose round, smooth shape and speed of movement through all parts of the living body accounts for the powers and activities which are peculiar to that body. Lucretius is recognized as a materialist and a mechanist, yet he sharply separates living from nonliving bodies and appeals to a special principle—the soul-atom—to explain this difference in kind.

As appears in the chapters on MIND and SOUL, Descartes is at variance not only with Lucretius but also with Aristotle, Galen, and Plotinus in his conception of the soul and of life. The soul is not a body or composed of bodies. Neither, in his opinion, is it an immaterial principle conjoined with organic matter to constitute the living body. It is itself an immaterial substance, quite separate from the human body to which it is allied.

Descartes tells us how he passed from "a description of inanimate bodies and plants . . . to that of animals, and particularly to that of men." He asks us to consider the supposition that "God formed the body of man altogether like one of ours . . . without making use of any matter other than that which I have described and without at first placing in it a rational soul or any other thing which might serve as a vegetative or sensitive soul." He then goes on to say that "examining the functions which might in accordance with this supposition exist in this body, I found precisely all those which might exist in us without our having the power of thought, and consequently without our soul—that is to say, this part of us, distinct from the body, of which it has been said that its nature is to think."

The mechanistic implications of his supposition are explicitly developed by Descartes in his consideration of Harvey's discovery of the motions of the heart and blood. These movements, he says, follow "as necessarily from the very disposition of the organs . . . as does that of a clock from the power, the situation, and the form, of its counterpoise and of its wheels." In these motions, as well as in the actions of the nerves, brain, and muscles, it is not necessary to suppose any other cause than those operating according "to the laws of Mechanics which are identical with those of nature."

This will not seem strange, Descartes adds, to those who know "how many different automata or moving machines can be made by the industry of man, without employing in so doing more than a very few parts in comparison with the great multitude of bones, muscles, nerves, arteries, veins or other parts that are found in the body of each animal. From this aspect, the body is regarded as a machine, which, having been made by the hands of God, is incomparably better arranged, and possesses in itself movements which are much more admirable, than any of those which can be invented by man." Only the functions of reason, only the acts of thinking—not those of living—operate under other than the mechanical laws of corporeal nature. Whether living or not, all bodies without reason or a ratio-

nal soul are automata or machines. Whatever they do can be explained as a kind of clockwork—by the disposition and interaction of their parts.

THE CARTESIAN VIEWPOINT has been extraordinarily fruitful in guiding the direction of research in the biological sciences, and 20th-century writers on the subject must be considered mechanists insofar as they assert that living things are formed of the same atoms as inanimate things, that the laws of physics are the same for both, and that no vital force is necessary to explain life. But they seem to reject the notion that the activities and properties of living matter differ only in degree of complexity from those of inanimate things. In other words, they hold that there is a fundamental discontinuity between living and nonliving things, based not on material composition or some postulated "life-force," but on structure or organization.

The peculiar structure of living matter causes new laws to come to light which are not observed among inanimate things. Waddington suggests the analogy of a computer: "Who, seeing a few pieces of glass, metal, plastic and so on, would suspect that they could beat him at chess? Yet we know that, assembled into a computer, they could wipe the floor with any but the world champions. The secret of their performance in this way is architecture, or, to use the Aristotelian term, form." In similar fashion, the distinctive characteristic of living matter—namely, its ability to avoid decay, to preserve and reproduce "orderliness"—is due to the unique molecular structure of chromosome fiber which is described by Schrödinger as an *aperiodic solid*. "The arrangements of atoms in the most vital parts of an organism," he writes, "differ in a fundamental way from all those arrangements of atoms which physicists and chemists have hitherto made the object of their experimental and theoretical research."

The purely mechanistic interpretation of life was shaken by quantum theory, for, as Waddington points out, the assertion that living things behave as though they were nothing but machines constructed of material compo-

nents "presupposes that one knows what mere material components are, and what kind of mechanisms they can be built into." Cartesian theory is built on a high degree of confidence in our knowledge of matter and the mechanical principles governing its motions; the substitution of quantum for classical mechanics destroyed the basis for this confidence. It is of no use to describe the workings of a complicated machine as reducible to the movement of individual cogs if one is unsure of how and why the cogs move. "It is not the case," writes Waddington, "that we begin by knowing all about the ultimate constituents of the inorganic world, and can then ask whether they can account for the observable phenomena of biology. Always, whether in physics or in biology, it is from observable phenomena that we have to start."

ANOTHER SOURCE and another version of the view that the continuity of nature is uninterrupted, comes from the theory of evolution. Darwin himself, in his brief consideration of the origin of life, deals mainly with the alternative hypotheses of the divine creation of a *single* original form or of *several* primitive forms from which the whole of the plant and animal kingdoms has developed by the natural steps of evolution. He rejects the division of the animate world into more than the two great kingdoms of plant and animal life, and holds that man differs from other animals only in degree, not in kind.

As indicated in the chapters on ANIMAL and EVOLUTION, Darwin questions the discontinuity between plants and animals. He refers to the intermediate forms which seem to belong to both kingdoms. He suggests the possibility that the lowest forms of animal life may have developed by natural evolutionary descent from plant organisms. But he does not *seriously* consider the hypothesis of an evolutionary transition from inorganic matter to living organisms. Here, on the contrary, he seems to recognize a difference in kind. "The most humble organism," he writes, "is something much higher than the inorganic dust under our feet; and no one with an unbiased mind can study any living creature, however

humble, without being struck with enthusiasm at its marvellous structure and properties." He questions the notion that living organisms might have originated from inorganic matter by spontaneous generation. "Science has not as yet proved the truth of this belief," he says, "whatever the future may reveal."

Nevertheless, with the extension of Darwin's theory of the origin of species into a doctrine of cosmic evolution, what William James calls "the evolutionary afflatus" leads writers like John Tyndall and Herbert Spencer to "talk as if mind grew out of body in a continuous way . . . So strong a postulate is continuity," James writes, that the evolutionists try to "leap over the breach" between inorganic matter and consciousness.

"In a general theory of evolution," he explains, "the inorganic comes first, then the lowest forms of animal and vegetable life, then forms of life that possess mentality, and finally those like ourselves that possess it in a high degree . . . We are dealing all the time with matter and its aggregations and separations; and although our treatment must perforce be hypothetical, this does not prevent it from being *continuous*. The point which as evolutionists we are bound to hold fast is that all the new forms of being that make their appearance are nothing more than results of the redistribution of the original and unchanging materials. The self-same atoms which, chaotically dispersed, made the nebula, now, jammed and temporarily caught in peculiar position, form our brains; and the 'evolution' of the brains, if understood, would be simply the account of how the atoms came to be so caught and jammed. In this story no new *natures*, no factors not present at the beginning, are introduced at any later stage."

James is here presenting a theory which he himself rejects. He recognizes the strength of the "postulate of continuity" in the theories of Spencer, Tyndall, and other evolutionists, but he thinks the evident "contrasts between living and inanimate performances" favor the division of nature into two realms. Yet he also seems to regard some degree of intelligence or mentality as an accompaniment of life. Hence his criterion of the difference in

kind "between an intelligent and a mechanical performance"—namely, purposiveness or "the pursuance of future ends and the choice of means"—also serves as the mark of distinction between the animate and the inanimate.

Whitehead offers a third approach to the problem. Like James, he rejects a mechanical and materialist explanation of life. "Evolution, on the materialistic theory," he says, "is reduced to the role of being another word for the description of the changes of the external relations between portions of matter. There is nothing to evolve, because one set of external relations is as good as any other set of external relations." But whereas James views purposiveness as a mark of distinction between animate and inanimate matter, Whitehead seems to attribute this quality in some degree to all things, whether we call them animate or inanimate. "The whole point of the modern doctrine," he writes, "is the evolution of complex organisms from antecedent states of less complex organisms. The doctrine thus cries aloud for a conception of organism as fundamental for nature."

IT IS WORTH remarking that this criterion is one of the tests Descartes proposes for differentiating man from all the rest of nature, man alone having reason or thought. It is also worth noting that in associating different degrees of mentality or consciousness with life at all levels of development, James himself affirms a continuity in the realm of all living things. He therefore does not go as far in the direction of discontinuity as do those in the tradition of the great books who find an essential difference between the inanimate and the living, between plant and animal, and between brute and human life.

The issues raised by these last two distinctions are further considered in the chapters on ANIMAL, MAN, and MIND. Here we are concerned only with the fact that those who find genuine differences in kind in the world of animate things also tend to distinguish between the living and the nonliving by reference to the most generic properties of corporeal life, that is, the powers or functions shared by plants, animals, and men. The question of origins

does not seem to be relevant to the problem of differences. Aquinas, for example, does not seem to regard the hypothesis of the spontaneous generation of living organisms from putrefying organic matter as inconsistent with his assertion that the vegetative functions of plants and animals are not performed—in any degree—by inanimate bodies.

When Aristotle says of natural bodies that “some have life in them, others not; and by life we mean self-nutrition and growth,” he is aware that the word “growth” occurs in the description of a certain type of change in inanimate bodies. Other than living things increase in size. To avoid an equivocal use of the word “growth,” he assigns three distinguishing characteristics to the quantitative change or increase in living things: “(1) Any and every part of the growing magnitude is made bigger, (2) by the accession of something, and (3) in such a way that the growing thing is preserved and persists.”

To exemplify this difference, Galen compares the growth of an organism with the expansion of a dried bladder when children blow air into it. The expanding bladder seems to grow, but not as it did when it was a part of a living animal and when the growth of the whole involved the growth of each part. “In these doings of the children,” Galen writes, “the more the interior cavity of the bladder increases in size, the thinner, necessarily, does its substance become. But, if the children were able to bring nourishment to this thin part, then they would make the bladder big in the same way that Nature does . . . To be distended in all directions belongs only to bodies whose growth is directed by Nature; for those which are distended by us undergo this distension in one direction but grow less in the others; it is impossible to find a body which will remain entire and not be torn through whilst we stretch it in the three dimensions. Thus Nature alone has the power to expand a body in all directions so that it remains unruptured and preserves completely its previous form.”

Modern biologists sometimes compare the growth of crystals in solution with living growth and reproduction. Or, making the point that “other systems in dynamic equi-

librium show in essence all the properties of living things,” they say that “it is almost impossible to distinguish a candle flame from a living organism.” Aristotle considers the latter comparison and rejects it. He observes that “the growth of fire goes on without limit so long as there is a supply of fuel”; but no amount of nutriment can increase the size of living things without limit. “There is a limit or ratio which determines their size and increase, and the limit and ratio are marks of the soul, but not of fire.”

The flame is a lively thing, but to say that it is alive, that it grows or dies, is in Aristotle’s view a poetic metaphor, not a scientific statement. “When I have plucked the rose,” Othello says, “I cannot give it vital growth again, it needs must wither.” But to the candle burning beside Desdemona’s bed, he says: “If I quench thee, thou flaming minister, I can again thy former light restore.” The flame is lit or extinguished by motions from without; but the birth and death, the nourishing and growth of the living thing is self-movement.

According to Aristotle and Aquinas self-movement is the essential mark of being alive. “All things are said to be alive,” Aquinas writes, “which determine themselves to movement or operation of any kind; whereas those things which cannot by their own nature do so, cannot be called living except by a similitude.” He further defines the meaning of self-movement by distinguishing between the *transitive* action of one inert body upon another and the *immanent* activity of a living thing, whereby the agent itself is perfected. Growing, sensing, and understanding are immanent actions because they are activities which affect the growing, sensing, or understanding thing. The result of such actions *remains in the agent*. In contrast, heating is a transitive action. In heating, one thing acts upon another, and the hot thing loses its own heat in the process.

As vital operations differ thus from the actions of inanimate bodies, so do vital powers differ from the capacities of inert matter, through which bodies can act upon or react to other bodies. The power of self-movement (or immanent activity) enables living things alone to change from a less perfect to a more per-

fect state of being, as measured by the thing's nature, rather than simply to change from contrary to contrary, as a body changes when it moves locally from this place to that, or alters from hot to cold, or cold to hot.

Schrödinger, like Aristotle and Aquinas, views self-movement as the essential quality which sets apart living from inanimate things. A piece of matter is said to be alive, he says, "when it goes on 'doing something,' moving, exchanging material with its environment, and so forth." By contrast, "when a system that is not alive is isolated or placed in a uniform environment, all motion usually comes to a standstill very soon as a result of various kinds of friction . . . A permanent state is reached, in which no observable events occur." He proceeds to define life according to the principles of thermodynamics: a living system is one that counteracts the tendency, common to all systems, to fall into disorder by drawing nourishment from its environment. Living things survive, Schrödinger says, by feeding on "negative entropy," or, to use a different phrase, by "sucking orderliness" from their environment.

FOR THE THEOLOGIAN, there is an additional aspect to the problem of defining life. If the realm of corporeal substances is divided into inert and living bodies, what is to be said about incorporeal substances (*i.e.*, the angels) and about God? It is easier to think of the angels as *not being* than to conceive them as *not being alive*. More than "infinite" or "omnipotent" or "eternal," "the ever-living God" is the phrase which, in the language of religious worship, expresses positively the divine nature. But the fundamental activities which distinguish living from nonliving bodies (such as nutrition, growth, reproduction) are essentially corporeal in nature. So, too, are sensing and locomotion. What common meaning of life, then, can apply to material and spiritual beings?

Aquinas answers by saying that "since a thing is said to live in so far as it operates of itself and not as moved by another, the more perfectly this power is found in anything, the more perfect is the life of that thing." By this criterion, plants are less perfectly alive than

animals, in whom self-movement is found to a higher degree because of their sensitive faculties; and among animals, there are grades of life according to degrees of sensitivity, and according to the possession of mobility, a power which certain animals seem to lack. In both the higher animals and in man, there is purposive behavior, but man alone, through his intellect and will, can freely determine his own ends and choose the means to them; hence these faculties give human life an even greater degree of self-movement.

But the action of the human intellect is not perfectly self-determined, for it depends in part upon external causes. Wherefore Aquinas concludes that life in the highest degree belongs properly to God—"that being whose act of understanding is its very nature and which, in what it naturally possesses, is not determined by another." He quotes Aristotle's remark that the perfection of God's life is proportionate to the perfection of the divine intellect, which is purely actual and eternally in act. And he goes on to remark that, in the sense in which understanding is movement, and that which understands itself moves itself, "Plato also taught that God moves Himself."

Nourishment, growth, and reproduction are indispensable features of corporeal life precisely because corporeal things are perishable. They need "reproduction to preserve the species," Aquinas writes, "and nourishment to preserve the individual." Hence the higher powers of life, such as sensing and understanding, are never found in corporeal things apart from the vegetative powers. This does not hold, however, for spiritual beings which are by nature imperishable. Spiritual life is essentially immortal life.

Subject to the ravages of time, corporeal life at every moment betrays its mortality—in its need for sleep, in the enfeeblement of its powers, in disease, decay, or degeneration. Death is the correlative of life for those who sharply divide the living from the nonliving. Rocks may crumble into dust, bodies may disintegrate, and atoms explode—but they do not die. Death is a change which only living matter undergoes.

The transition from life to death accentu-

ates the mystery of life. The notion of spontaneous generation aside, life always seems to come from life. Whether by cell division or by germination, the living thing that is generated comes from the living substance of another thing. But when a living thing dies, it crosses the gap between the living and the nonliving. As the organic matter of the corpse decomposes, nothing is left but the familiar inorganic elements and compounds. This seems to be a change more radical than generation or birth. All the metaphysical problems of form and substance, of matter and the soul, of continuity and discontinuity in nature, which appear in the analysis of life, become more intense in the understanding of death.

AS APPEARS IN the chapter ON IMMORTALITY, the living are preoccupied with death, not predominantly with analyzing it, but with facing and fearing it, struggling against or embracing it. Death, as the great poems reveal, is the object of soliloquy in moments of greatest introspection or self-appraisal. To die well, Montaigne points out, requires greater moral stamina than to live well. For him the essence of the philosophical temper, as for others the meaning of heroism or martyrdom, consists in facing death with an equanimity which reflects the highest qualities of a well-resolved life.

Montaigne devotes a long essay to the subject that "to philosophize is to learn to die," and he begins it by quoting Cicero's statement that to study philosophy "is nothing else but to prepare for death." Socrates then is the prototype of the philosopher, for in conversation with his friends in prison while awaiting death, he tells them that "the true votary of philosophy . . . is always pursuing death, and dying." He tries to prove to them, by his actions as well as by his words, that "the real philosopher has reason to be of good cheer when he is about to die."

While the ideal of the philosopher may be to face death with equanimity, the poet uses the specter of death to convey lessons to the living: the frailty of life, the fleetingness of earthly glory, and the grim equality of fate shared by all men. These themes received particular emphasis during the Middle Ages, as

Huizinga recounts, but they have recurred in art and literature throughout history. Religion in particular has sought to use the fear of death—and what waits after it—to arouse the conscience of the living. "Ever to suffer, never to enjoy; ever to be damned, never to be saved; ever, never; ever, never," warns the preacher in Joyce's *A Portrait of the Artist as a Young Man*. "Such is the terrible punishment decreed for those who die in mortal sin by an almighty and a just God."

Not only death but the dead exercise a profound effect upon the living. The historians describe the various forms which the ceremonials of death take in every society. Whether the rituals are secular or sacred, they are among the most significant customs of any culture, for they reveal the value placed upon life and the conception of life's meaning and man's destiny. No deeper differences exist among the great religions than those which appear in the practices or sacraments in preparation for death and in the services for the dead.

The moral, social, and religious aspects of death appear to be peculiarly human. Yet on the biological level, the same fundamental instincts and emotions seem to prevail in animals and men. The struggle to remain alive may be presumed to occur in plants. But it is not there as plainly discernible as in the specific patterns of behavior manifested by the animal instinct of self-preservation. Almost in proportion to the degree of vitality, the instinct of self-preservation operates with a strength and pertinacity as vigorous as the love for life and arouses as an emotional corollary an equally devouring fear of death.

The instinct of self-preservation is the life instinct. Directed toward the related ends of maintaining and increasing life are the reproductive impulses and the erotic instincts. But, according to Freud, there is in all living matter a more primitive instinct than these, and one which aims in the opposite direction. That is the death instinct—the impulse of the living to return to lifelessness.

"It would be contrary to the conservative nature of instinct," Freud writes, "if the goal of life were a state never hitherto reached. It must rather be an ancient starting point, which

the living being left long ago, and to which it harks back again . . . If we may assume as an experience admitting of no exception that everything dies from causes within itself, and returns to the inorganic, we can only say "The goal of all life is death."

The death instinct, according to Freud, originates with life itself. "At one time or another, by some operation of force which completely baffles conjecture, the properties of life were awakened in lifeless matter . . . The tension then aroused in the previously inanimate matter strove to attain an equilibrium; the first instinct was present, that to return to lifelessness." The death instinct acts against the tendency of the erotic instincts, "which are always trying to collect living substances together into ever larger unities . . . The cooperation and opposition of these two forces produce the phenomena of life to which death puts an end."

Freud's hypothesis of the death instinct has a bearing on the impulse to commit suicide and on the question whether it is natural or perverse for men to choose this escape from the tensions and difficulties of life. The psychological problem here, especially with regard to the unconscious forms of the suicidal impulse, is not the same as the moral problem. The question whether animals other than men ever commit suicide, like the question whether the killing of one animal by another can be called "murder," indicates the difference between psychological description and moral judgment.

FOR THE MORALIST the condemnation of suicide seems to rest on the same grounds as the condemnation of murder. With Kant, for example, it represents the same type of violation of the universal moral law. The categorical imperative requires us to act always as if the maxim of our individual action could be universalized as a rule for all men to follow. But, in the case of suicide as in the case of

murder, the maxim of the action cannot be universalized without accomplishing a result which no one intends. Furthermore, suicide is not consistent with the idea of the human person as an end in itself. The man, says Kant, who destroys himself "in order to escape from painful circumstances uses a person merely as a means to maintain a tolerable condition up to the end of life."

Suicide is also condemned by the theologians as a contravention of the divine as well as of the natural law. Men are God's handiwork and, therefore, as Locke puts it, "they are His property . . . made to last during His, not one another's, pleasure." Under the natural law, a man is not at liberty to destroy himself, nor consequently is he at liberty to sell himself into slavery. Everyone "is bound to preserve himself and not quit his station willfully." If, furthermore, there is an afterlife of rewards and punishments, suicide is no escape. "Death so snatched," Adam tells Eve in *Paradise Lost*, "will not exempt us from the pain we are by doom to pay."

There is similar reasoning in pagan antiquity. Suicide is an act of violence and, says Plotinus, "if there be a period allotted to all by fate, to anticipate the hour could not be a happy act . . . If everyone is to hold in the other world a standing determined by the state in which he quitted this, there must be no withdrawal as long as there is any hope of progress." A Christian would add that to relinquish hope as long as life persists is the sin of despair.

But the pagan tradition also speaks with an opposite voice. For the Stoics, suicide does not seem to be as reprehensible as murder. To those who complain of life's pains and the fetters of the body, Epictetus says, "The door is open." In a doctrine in which all things that affect only the body are indifferent to the soul's well-being, death too is indifferent. "Death is the harbor for all; this is the place of refuge; as soon as you choose, you may be out of the house."