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Man

INTRODUCTION

WHETHER or not the proper study of mankind is man, it is the only study in which the knower and the known are one, in which the object of the science is the nature of the scientist. If we consider every effort men have made in response to the ancient injunction "know thyself," then psychology has perhaps a longer tradition than any other science. But by a stricter conception of science, more is required than individual insight or self-consciousness. Definitions, principles, analyses applicable to all men must be established, and it has been questioned whether the method of introspection suffices for this purpose. What methods should be used by the psychologist depends in part upon the precise object and scope of his inquiry. According as different subject matters and different methods define psychology, there seem to be several disciplines bearing that name, each with its own tradition in western thought.

In one conception, psychology begins with the dialogues of Plato and with Aristotle's treatise *On the Soul*. As Aristotle's title indicates, and as the Greek roots of the word "psychology" connote, the soul rather than man is the object of the science. Anthropology, Kant later suggests, would be a more appropriate name for the science of man. The Greek inquiry into the soul extends, beyond man, to all living things. It is because "the soul is in some sense the principle of animal life," Aristotle writes, that "the knowledge of the soul admittedly contributes greatly to the advance of truth in general, and, above all, to our understanding of Nature."

Nevertheless, psychology for the Greeks is principally concerned with the study of man. The analysis of the parts or faculties of the human soul is an analysis of the properties of human nature—the powers which man has and the characteristically human acts or functions he can perform. The methods by which this analysis is developed are, for the most part, the same methods which the Greek philosophers use in physics. "The study of the soul," Aristotle writes, "falls within the science of Nature." The definitions of the psychologist, like those of the physicist, give "a certain mode of movement of such and such a body (or part or faculty of a body) by this or that cause and for this or that end." In the case of the human soul, however, the psychologist can employ a method not applicable to other things. The human intellect is able to examine itself. Mind can thus know things about mind which are not otherwise observable.

The subject matter of psychology narrows somewhat when, at a later moment in the tradition, the study of mind tends to replace the study of man. This narrowing takes place gradually. Though Descartes identifies soul with mind or intellect, he treats of the passions and the will as well as thought and knowledge. Differing from Descartes with regard to body and soul, Hobbes and Spinoza also give as much attention to the emotions as to ideas and reasoning. But with Locke, Berkeley, and Hume there is an increasing tendency to analyze the contents of consciousness and the acts of the understanding, treated exclusively as a faculty of thinking or knowing. Where in the earlier tradition the observation of human behavior and the behavior of other animals appears to be useful in psychology, here the main source of psychological knowledge seems to be introspection.

The Principles of Psychology by William

James and the writings of Sigmund Freud represent a return to the broader conception of the science. According to James, "it is better . . . to let the science be as vague as its subject . . . if by so doing we can throw any light on the main business in hand." If psychology "takes into account the fact that minds inhabit environments which act on them and on which they in turn react" and "takes mind in the midst of all its concrete relations, it is immensely more fertile than the old-fashioned 'rational psychology,' which treated the soul as a detached existent, sufficient unto itself, and assumed to consider only its nature and properties. I shall therefore feel free," James goes on to say, "to make any sallies into zoology or into pure nerve-physiology which may seem instructive for our purposes."

Though in the hands of James and Freud the scope of psychology extends no further than the range of topics Aquinas covers in his treatise on man and his treatise on human acts and passions, their return to the study of man as a whole is accompanied by an interest in or invention of new methods, experimental and clinical. "As a science," Freud writes, "psychoanalysis is characterized by the methods with which it works, not by the subject matter with which it deals." Those who distinguish between science and philosophy in terms of empirical research date the beginning of psychology from the inception of these new methods. They regard most psychological writings earlier than James and Freud as works of speculation or philosophy.

Controversy over the validity of conclusions in psychology sometimes turns on the conflicting claims of rival methods to be the *only* way of arriving at the truth; and sometimes, as with Kant, the issue of method seems to be subordinate to the issue of subject matter. Kant admits the possibility of an empirical psychology which would confine its inquiries to the phenomenal processes of thought and feeling, because with respect to such an object "we could call in aid observations on the play of our thoughts," and thence derive "natural laws of the thinking self." But, he goes on to say, "it could never be available for discovering those properties which do not belong to possible experience."

What Kant calls "rational psychology" aims at what is for him impossible, namely, knowledge of the reality or substance of the soul itself. It is impossible, he says, to make "any dogmatical affirmation concerning an object of experience beyond the boundaries of experience." Kant's critique of rational psychology thus appears to be based on the same principles which underlie his critique of metaphysical assertions concerning God's existence and the freedom of the will.

Those principles are in turn based on an elaborate theory of the human faculties, such as sense, understanding, and reason, and the role they play in the constitution of experience and knowledge. But Kant does not regard his own theory of the faculties as psychology. Writers like Locke and Hume, on the other hand, seem to make their psychology—certainly in its principal concern with how the content of the mind is acquired and formed—the basis for appraising the validity of all other knowledge. They do not question the validity of psychology itself. They seem to assume that self-knowledge has unique advantages over all other inquiries.

THESE ISSUES of the scope and validity of psychology are in one sense more relevant to the chapters on KNOWLEDGE, MIND, and SOUL than to this one. Their relevance here is limited by their connection with the main issues about the nature of man. Not merely the tradition of psychology, but the whole tradition of western thought seems to divide on the question of man's essence.

The question can be put in a number of ways. Is man a rational animal, and does that definition imply that only man has reason? Does it imply that man has free will, and that only man has free will? Like the question about the distinction between living and nonliving things or the similar question about the difference between plants and animals, this question can also be asked in terms of the contrast between difference in kind and difference in degree. Does man differ essentially or in kind from other animals, or do all ani-

mals possess the same fundamental properties? Does man differ from the others only in the degree to which he possesses some of these shared qualities?

Some, like Darwin, think that "the difference in mind between man and the higher animals, great as it is, certainly is one of degree and not of kind. We have seen," he writes, "that the senses and intuitions, the various emotions and faculties, such as love, memory, attention, curiosity, imitation, reason, etc., of which man boasts, may be found in an incipient, or even sometimes in a well-developed condition, in the lower animals. They are also capable of some inherited improvement, as we see in the domestic dog compared with the wolf or jackal. If it could be proved that certain high mental powers, such as the formation of general concepts, self-consciousness, etc., were absolutely peculiar to man, which seems extremely doubtful, it is not improbable that these qualities are merely the incidental results of other highly-advanced intellectual faculties; and these again mainly the result of the continued use of a perfect language." Such a view clearly takes the position that man varies from other animals in the same way that one species of animal varies from another.

Those who take the opposite position do not always agree on the precise nature of the difference in kind. For the most part, they attribute rationality to man alone and use the word "brute" to signify that all other animals totally lack reason, no matter how acute their intelligence or the apparent sagacity of their instinctive reactions. Milton, for example, in common with many others, describes man as

> . . . a creature who not prone
> And brute as other creatures, but endued
> With sanctity of reason, might erect
> His stature, and upright with front serene
> Govern the rest, self-knowing, and from thence
> Magnanimous to correspond with heaven.

Those who find a difference in kind between man and other animals also tend to think that human society and human language are essentially different from the beehive or the ant mound, from bird calls, jungle cries, or parroting, because they are the work or expression of reason. Unlike Darwin, some of them find in human speech not the cause of man's *apparent* difference in kind from other animals, but the consequence of his *real* difference in kind—his distinctive rationality. The fact that man does certain things that no other animal does at all means to them that man possesses certain powers which no other animal shares to any degree, even the slightest. They would therefore interpret Darwin's admission that an anthropoid ape could not fashion "a stone into a tool" or "follow a train of metaphysical reasoning, or solve a mathematical problem, or reflect on God, or admire a grand natural scene," as an indication that the ape totally lacked human reason or intellect, however acute his animal intelligence. But the writers who agree that man is radically different from the brutes do not all agree in the account they give of human reason; nor do they all affirm free will as the natural accompaniment of rationality.

Locke, for example, begins his essay *Concerning Human Understanding* with the remark that "the understanding . . . sets man above the rest of sensible beings." Men and other animals alike have the powers of sense, memory, and imagination, but, he says, "brutes abstract not . . . The power of abstracting is not at all in them." This power of having "general ideas is that which puts a perfect distinction betwixt man and brutes, and is an excellency which the faculties of brutes do by no means attain to." But Locke denies that man has free will in the sense of a free choice among alternatives. Rousseau, on the other hand, declares that "every animal has ideas . . . and it is only in degree that man differs, in this respect, from the brute . . . It is not, therefore, so much the understanding that constitutes the specific difference between the man and the brute, as the human quality of free agency . . . and it is particularly in his consciousness of this liberty that the spirituality of his soul is displayed."

James agrees with Locke that "it is probable that brutes neither attend to abstract characters nor have associations by similarity," but it is the latter fact which James himself makes the principal distinction between man and brute. "We may," he asserts, "consider

it proven that the most elementary single difference between the human mind and that of brutes lies in this deficiency on the brute's part to associate ideas by similarity." James enumerates "other classical *differentiae* of man besides that of being the only reasoning animal." Man has been called, he says, "the laughing animal" and "the talking animal," but these distinctive traits, like human reasoning, James regards as "consequences of his unrivalled powers . . . to associate ideas by similarity."

Reason and speech are for James the effects, where for Adam Smith they are the cause, of man's peculiarly human attributes. "The propensity to truck, barter, and exchange one thing for another," Smith writes, is "common to all men, and to be found in no other race of animals." This seems to him to be a "necessary consequence of the faculties of reason and speech" which are peculiar to man. Hobbes, as we shall see presently, takes still another position, since he explains man's reasoning power in terms of his faculty of speech, a faculty which is possessed by no other animal. Tocqueville remarks that "Though man resembles the animals in many respects, one characteristic is peculiar to him alone: he improves himself, and they do not."

Discussions of the difference between man and other animals are not only the province of philosophers and social theorists, but also of writers of fiction, who are often not as quick to praise man over beasts. In Swift's *Gulliver's Travels,* the horselike Houyhnhnms criticize the human race as lacking reason and virtue, and in *Moby Dick,* Melville demonstrates how the whale is far more sublime than man. In *Animal Farm,* Orwell gives new meaning to Aristotle's statement that "man is a political animal" by comparing man to such creatures as pigs and sheep—political epithets that are still in vogue. Certainly the most shocking of fictional comparisons between men and animals appears in Kafka's *The Metamorphosis,* where the opening line tells the reader that the main character has been transformed into a cockroach—a symbol of lowly existence as Kafka sees it.

Despite all these variations in theory or explanation, writers like Locke, Rousseau, James, Smith, and perhaps Hobbes seem to agree that man and brute differ in kind. On that point they agree even with writers like Plato, Aristotle, Augustine, Aquinas, Descartes, Spinoza, Kant, and Hegel who hold, as they most definitely do not, that man has a special faculty of mind, reason, or intellect. The contradictory position is, therefore, not to be found in the denial of some particular theory of reason, but rather in the denial that any faculty or attribute which man possesses warrants our calling him "rational" and other animals "brute."

THE ISSUE IS sharply drawn between these contradictory positions. Yet it is avoided by those who go no further than to see in human civilization certain distinctive features, such as the arts and sciences, or law, government, and religion. J. S. Mill, for example, discussing the sentiment of justice, finds its root in the natural impulse "to resent, and to repel or retaliate, any harm done or attempted against ourselves, or against those with whom we sympathise . . . common to all animal nature." Man differs from other animals, he writes, "first, in being capable of sympathising, not solely with their offspring, or, like some of the more noble animals, with some superior animal who is kind to them, but with all human and even with all sentient beings. Secondly, in having a more developed intelligence, which gives a wider range to the whole of their sentiments, whether self-regarding or sympathetic. By virtue of his superior intelligence, even apart from his superior range of sympathy, a human being is capable of apprehending a community of interest between himself and the human society of which he forms a part."

A view of this sort would seem to leave open the question whether such typically human developments signify the possession by man of special powers which set him apart as *different in kind.* While admitting extraordinary differences between the behavior or accomplishments of men and other animals, this view does not reject the possibility that such accomplishments may represent merely wide differences in degree of power, which give the *appearance* of differences in kind.

As we have already observed, the issue about man and brute cannot be separated from the controversy about the so-called "higher faculties" of man. Except for the view that man is a purely spiritual being, who merely inhabits or uses a physical body, no theory of human nature doubts that man, as a living organism, possesses in common with plants and animals certain bodily powers or functions. The vegetative functions which Galen calls "the natural faculties" are indispensable to human as to all other forms of corporeal life. Similarly, the powers of sensitivity and appetite or desire are obviously present in man as in other animals. To the observer, who sees only the externals of human and animal behavior, men and the higher animals appear to react to the physical stimulation of their sense organs with a similar repertoire of bodily movements, which vary only as their skeletal structure and their organs of locomotion differ. They also manifest outward signs of inner emotional disturbance sufficiently similar to warrant treating emotions like fear and rage as common to men and other animals.

On all this there seems to be little dispute in the tradition of the great books. But difficult questions arise when the inner significance of these external movements is considered. Both men and animals have the familiar sense organs and such powers as touch, taste, smell, hearing, and vision. But do sensations give rise to knowledge in the same way for both men and animals? Do the powers of memory and imagination extend an animal's range of apprehension as they do man's? Do these powers affect the perception of present objects in the same way for men and animals?

Such questions are not readily answered by observation of external behavior alone. What seems to be called for—a comparison of human and animal experience—cannot be obtained. The difficulty of the problem becomes most intense when a special faculty of knowledge or thought is attributed to man, for animal and human sense perception, imagination, or even emotion may be incommensurable if a special factor of understanding or reason enters into all human experience and is totally absent from that of animals.

In the ancient and medieval periods, the sensitive faculty, including the interior sensitive powers of memory and imagination, is generally distinguished from another faculty, variously called "intellect," "reason," or "mind." Writers like Plato, Aristotle, Plotinus, Lucretius, Augustine, and Aquinas have different conceptions of intellect or mind, in itself and in its relation to sense and imagination, but they do not question its existence as a separate faculty. The range of the sensitive powers does not extend to ideas or intelligible objects, nor is sensitive memory or imagination for them the same as rational thought.

Not only does it seem unquestionable in the ancient and medieval tradition that man has these two distinct faculties of knowledge, but it is generally assumed that other animals have to a greater or less degree, the power of the senses alone. Only men can understand as well as perceive; only men can know the universal as well as the particular; only men can think about objects which are neither sensible nor, strictly, imaginable—objects such as atoms and God, the infinite and the eternal, or the intellect itself. The affirmation of an essential difference between reason and sense seems to be inseparable from the affirmation of an essential difference between men and brutes.

DOUBTS OR DENIALS with regard to both affirmations achieve considerable prevalence in modern times. But though the two affirmations appear inseparable, they are not always denied together. Montaigne, for example, does not so much doubt that men have reason as he does that other animals lack it. He considers the matter in the light of external evidences, in terms of the comparable performances of men and animals. The light of reason seems to shine in both.

He repeats many stories from Plutarch, Pliny, and Chrysippus that supposedly reveal the comparable mentality of animals and men. One is the story of the hound who, following the scent, comes to a triple parting of the ways. After sniffing along the first and second paths and discovering no trace of the scent, the hound, without a moment's hesitation or sniffing, takes up the pursuit along the third

trail. This, Montaigne suggests, is a kind of syllogizing; as if the dog reasoned thus with himself: "I have traced my master to this crossroad; he must necessarily be going by one of these three roads; it is not by this one or that one; so he must infallibly be going by this other."

It is noteworthy that Aquinas tells exactly the same story in order to make the point that such *appearances* of reasoning in animals can be explained as instinctively determined conduct. "In the works of irrational animals," he writes, "we notice certain marks of sagacity, in so far as they have a natural inclination to set about their actions in a most orderly manner through being ordained by the supreme art. For which reason, too, certain animals are called prudent or sagacious; and not because they reason or exercise any choice about things." That such behavior is not the work of reason, he claims, "is clear from the fact that all that share in one nature invariably act in the same way."

Unlike Montaigne, Machiavelli seems to imply that men and brutes are alike not in having reason, but in lacking it. The passions control behavior. Intelligence exhibits itself largely as craft or cunning in gaining ends set by the passions. Man is no less the brute in essence because in the jungle of society he often succeeds by cunning rather than by force. He may have more cunning than the fox, but without armor he also has less strength than the lion. The prince, Machiavelli remarks, "being compelled knowingly to adopt the beast, ought to choose the lion and the fox, because the lion cannot defend himself against snares and the fox cannot defend himself against wolves."

For the most part, however, the modern dissent from the ancient and medieval view takes the form of denying that reason and sense are distinct powers. In its most characteristic expression, this denial is accompanied by a denial of abstract ideas as in the writings of Hobbes, Berkeley, and Hume. Their position, discussed more fully in the chapter on UNIVERSAL AND PARTICULAR, is that men only give the appearance of having abstract or general ideas because they employ common names which have general significance.

Language, according to Hobbes, is the root of all other differences between man and brute. Sense and imagination are "common to man and beast." Reasoning, or the "train of thoughts," can take place in any animal which has memory and imagination. But that type of understanding which Hobbes describes as "conception caused by speech" is peculiar to man. His statement that "by the help of speech and method, the same faculties" which belong to both men and beasts "may be improved to such a height as to distinguish men from all other living creatures," would seem to imply that Hobbes regards man as superior to other animals only in degree. Yet, on the other hand, he enumerates a variety of institutions peculiar to human life, such as religion, law, and science, which imply a difference in kind.

Like Hobbes, Berkeley thinks that men use general names but do not have general or abstract ideas. But he seems much less willing than Hobbes to assert man's clear superiority, even on the basis of man's attainments through the power of speech. If the fact that "brutes abstract not," he says in reply to Locke, "be made the distinguishing property of that sort of animals, I fear a great many of those that pass for men must be reckoned into their number." Hume goes further than either Berkeley or Hobbes. Agreeing with them that man has no faculty above sense and imagination, and hence no faculty which animals do not also possess, he alone explicitly draws the conclusion which that implies.

"Animals as well as men," he writes, "learn many things from experience and infer that the same events will always follow from the same causes." Such inferences, in animals or men, are not "founded on any process of argument or reasoning." They are the result of the operation of custom and instinct. "Were this doubtful with regard to men, it seems to admit of no question with regard to the brute creation; and the conclusion being once firmly established in the one, we have a strong presumption, from all the rules of analogy, that it ought to be universally admitted, without any exception or reserve."

But if custom and instinct underlie the appearance of reasoning in both men and animals,

it may be asked, says Hume, "how it happens that men so much surpass animals in reasoning, and one man so much surpasses another?" His answer seems to be entirely in terms of degree of the same factors. The same sort of difference which obtains between a superior and an inferior intelligence among men obtains between men and other animals.

All the evidence which Darwin later assembles on the characteristics of human mentality is offered by him in proof of the same point. But to those who think that man alone has an intellect or a rational faculty, over and above all his sensitive powers, such evidence remains inconclusive. As in the case of the dog, whose behavior Aquinas and Montaigne interpret differently, the same observed facts seem to be capable of quite opposite explanation by those who hold opposite theories of human and animal intelligence.

Is THERE INTERNAL evidence, obtained from man's introspective experience of his own thought, which can resolve the controversy? As Descartes sees it, the interpretation of such evidence also seems to depend on the prior assumption one makes about the sameness or difference of men and brutes.

"We cannot help at every moment experiencing within us that we think," he writes; "nor can anyone infer from the fact that it has been shown that the animate brutes can discharge all these operations entirely without thought, that he therefore does not think; unless it be that having previously persuaded himself that his actions are entirely like those of the brutes, just because he has ascribed thought to them, he were to adhere so pertinaciously to these very words, '*men and brutes operate in the same way*,' that when it was shown to him that the brutes did not think, he preferred to divest himself of that thought of his of which he could not fail to have an inner consciousness, rather than to alter his opinion that he acted in the same way as the brutes."

On the other hand, Descartes continues, those who hold "*that thought is not to be distinguished from bodily motion*, will with much better reason conclude that it is the same thing in us and in them, since they notice in them all corporeal movements as in us; they will add *that a difference merely of greater and less makes no difference to the essence*, and will infer that, though perchance they think that there is less reason in the beasts than in us, our minds are of exactly the same species."

THE ISSUE concerning the senses and the reason is more fully discussed in the chapters on MIND and SENSE, and also in the chapters on IDEA and UNIVERSAL AND PARTICULAR, where the problem of abstract ideas or universal notions is considered. The issue concerning soul in general and the human soul in particular belongs primarily to the chapter on SOUL, and also to the chapter on MIND. But like the issue about sense and intellect, its bearing on the problem of man's nature deserves brief comment here.

The question is not whether man has a soul, but whether only man has a soul; a rational soul; a soul which is, in whole or in part, immaterial; a soul capable of separate existence from the body; an immortal soul. If soul is conceived as the principle of life in all living organisms—as Aristotle conceives it—then having a soul does not distinguish man from plants or animals. If, furthermore, the rational soul is distinguished from the sensitive and vegetative soul in the same way that men are distinguished from brute animals and plants, namely, by reference to certain powers, such as intellect and will, then the statement that men alone have rational souls would seem to add nothing to the statement that men alone are rational.

But if the human soul, through being rational, confers a mode of immaterial, or spiritual, being upon man, then man's possession of such a soul sets him apart from all other physical things, even further than the special power of reason separates him from the brutes. The position of Lucretius illustrates this distinction in reverse. He does not deny that man has a soul. Unlike other living things which also have souls, man's soul includes a special part which Lucretius calls "mind" or "intellect." He describes it as "the force that gives direction to a life / As well as understanding," and "a part

/ Of a man's make-up, every bit as much / As are his hands and feet and seeing eyes."

So far as his having this special faculty is concerned, man is set apart. But for Lucretius nothing exists except atoms and void. Consequently, "mind . . . must have a bodily nature," which consists of "particles very round and smooth indeed, / And very small indeed, to be so stirred . . . in motion by the slightest urge." In his physical constitution man does not differ in any fundamental respect from any other composite thing. The materiality of his soul, furthermore, means that it is as perishable as any composite body.

At the other extreme from Lucretius, Descartes conceives man as a union of two substances. "I possess a body," he writes, "with which I am very intimately conjoined, yet because, on the one side, I have a clear and distinct idea of myself inasmuch as I am only a thinking and unextended thing, and as, on the other, I possess a distinct idea of body as it is only an extended and unthinking thing, it is certain that this I (that is to say, my soul by which I am what I am), is entirely and absolutely distinct from my body and can exist without it." Nevertheless, "sensations of pain, hunger, thirst, etc." lead Descartes to add: "I am not only lodged in my body as a pilot in a vessel, but . . . I am very closely united to it, and so to speak so intermingled with it that I seem to compose with it one whole."

Only man has a dual nature, thus compounded. Other living things, Descartes seems to hold, are merely bodies, having the structure and operation of complex machines. If, like the "*automata* or moving machines . . . made by the industry of man," there were "such machines, possessing the organs and outward form of a monkey, or some other animal without reason, we should not have . . . any means of ascertaining that they were not of the same nature as those animals."

It is indifferent to Descartes whether other animals are conceived as automata or whether, because they have life, sensation, and imagination, they are granted souls. "I have neither denied to the brutes," he writes, "what is vulgarly called life, nor a corporeal soul, or organic sense." What he has denied is thought, and it is this one factor which makes it impossible for a machine to imitate human speech and action. It is this one factor which also requires man's soul, unlike that of the brute, to be an incorporeal substance.

Unlike sensations and passions, acts of thought and will, according to Descartes, cannot be functions of bodily organs. "Even though I were to grant," he says, "that thought existed" in dogs and apes, "it would in nowise follow that the human mind was not to be distinguished from the body, but on the contrary rather that in other animals also there was a mind distinct from their body." When Descartes affirms man's uniqueness, he is therefore affirming more than that man alone has reason and free will. He is affirming that of all things man alone is "formed of body and soul"—not a corporeal soul, but a spiritual substance. The angels, in contrast, are simply spirits.

The remark of Plotinus, that "humanity is poised midway between the gods and the beasts," applies with somewhat altered significance to the Cartesian view. But there are other conceptions of the human constitution which, though they preserve the sense of man's dual nature, do not make him a union of two separate substances.

Spinoza, for example, gives man special status in the order of nature by conferring on him alone participation in the divine mind. "The human mind," he writes, "is a part of the infinite intellect of God." The human body, on the other hand, is "a mode which expresses in a certain and determinate manner the essence of God in so far as He is considered as the thing extended." Man is thus "composed of mind and body," but for Spinoza this duality in human nature is a duality of aspects, not a duality of substances.

There is still another way in which a certain immateriality is attributed to man. In Aristotle's theory, the soul is not a substance in its own right, but the substantial form of an organic body. This is true of all kinds of souls—whether of plants, animals, or men. But when Aristotle enumerates the various powers which living things possess—such as "the nutritive, the appetitive, the sensory, the

locomotive, and the power of thinking"—he assigns to man alone, or "possibly another order like man or superior to him, the power of thinking, *i.e.*, mind." Furthermore, of all the parts or powers of the soul, thinking seems to Aristotle to afford "the most probable exception" to the rule that "all the affections of soul involve body."

Apart from thinking, "there seems to be no case," he says, "in which the soul can act or be acted upon without involving body." Whereas the sensitive powers are seated in bodily organs and cannot act except as bodily functions, the intellect is immaterial. It has no bodily organ which is comparable to the eye as the organ of vision and the brain as the organ of memory and imagination. The act of understanding is not a function of physical matter.

According to this theory, man as a whole is a single substance, composite of correlative principles of being—matter and form, or body and soul. But man differs from all other physical substances which are similarly composite in that he has a faculty and mode of activity separate from matter. In the later development of this theory by Aquinas, the immateriality of the intellect becomes the basis for arguing that the rational soul of man can exist apart from matter when the composite human substance is disintegrated by death.

As indicated in the chapters on IMMORTALITY and SOUL, this is not the only argument for the immortality of the soul. We are not here concerned, however, with the various arguments and their merits, but only with the fact that certain conceptions of man's constitution attribute to man something more than the power of rationality, namely, the distinction of having a spiritual and immortal life.

HIS FUTURE AND his past color the present life of man and alter the aspect under which he conceives his place in the general scheme of things. Immortality promises release from mutability as well as salvation from death. With an immortal soul, man belongs to eternity as well as to time. He is not merely a transient character in the universe. His stature and his dignity are not the same when man regards himself as completely dissolvable into dust.

The question of man's past or origin is, perhaps, even more critical in its bearing on man's present status. Ancient poetry and history contain many myths of man's kinship with the gods. The heroes trace their lineage back to the gods. Through them or through the progenitors of the race, man conceives himself as of divine descent or, at least, as having more affinity with the immortal gods than with all other earthbound things.

In *The Descent of Man,* Darwin paints a different picture of human origin. Two propositions determine its general outlines. The first, already stated, is that man belongs to the animal kingdom without any differentiation except in degree. Not only in anatomy, physiology, and embryology are there marks of man's affinity with the mammals; man's behavior and mentality also show, according to Darwin, that man possesses no attribute so peculiarly human that some trace of it cannot be found in the higher forms of animal life.

The second proposition is that man's origin on earth has come about by a process of natural variation from an ancestral type, exactly as other new species of plants or animals have originated by descent with variation from a common ancestor. This theory of the origin of species is discussed in the chapter on EVOLUTION. Its special application to the human species involves the notion of a common ancestor for both man and the anthropoid apes, and the disappearance not only of the ancestral form, but of the intermediate varieties—the so-called "missing links" in the chain of variation.

These two propositions are logically interdependent. If the proposition is false that man differs from other animals only in degree, the proposition cannot be true that man originated along with the anthropoid apes by descent from a common ancestor. Conversely, if the Darwinian theory of man's origin is true, it cannot be true that men and brutes differ in kind. But though the truth of each of these two propositions implies the truth of the other, the problem of the difference between man and other animals has a certain logical priority over the problem of man's origin, simply because more evidence is available to solve it.

That question calls for an examination of man as he is today in comparison with other extant species; whereas the other question necessarily requires the collection and interpretation of historical evidence, which may have some bearing on hypothetical missing links.

It should be added that if, in regard to the first question, the evidence favored the affirmation of a difference in kind, that would not entail the denial of biological evolution, though it would necessarily challenge the Darwinian theory of how such evolution took place. One alternative to the Darwinian hypothesis is the theory of emergent evolution, according to which lower forms of life may give rise to new organic forms which are not only higher but are distinct in kind.

Whether or not Christian theology and some theory of biological evolution can be reconciled, there seems to be an inescapable contradiction between Darwin's view of man's origin and the Judeo-Christian conception of man as a special creation, special above all in the sense that "God created man in his own image."

As God is in essence a perfect intelligence and a spiritual being, man, according to Aquinas, "is said to be to the image of God by reason of his intellectual nature." In all creatures "there is some kind of likeness to God," but it is only in man that that likeness is an image. Man's finitude, imperfection, and corporeal existence make the image a remote resemblance; yet, according to the theologians, it is precisely that likeness which separates man from all other earthly creatures and places him in the company of the angels.

But man is no more an angel than he is a brute. He is separated from the one by his body as from the other by his reason. Nor does he in the present life have the spiritual existence of a disembodied and immortal soul. To these three negatives in the definition of man—*not* an angel, *not* a brute, *not* a soul—the Christian theologian adds a fourth, drawn from man's past. Man is of the race begotten by Adam, but he does not have the attributes which Adam possessed before the fall.

The dogma of man's fall from grace is discussed in the chapter on SIN. Here we are concerned only with its implications for the understanding of man's present nature, as not only being deprived of the extraordinary gifts of life and knowledge which Adam lost through disobedience, but as also being wounded in perpetuity by Adam's sin. Weakness, ignorance, malice, and concupiscence, Aquinas declares, "are the four wounds inflicted on the whole of human nature as a result of our first parent's sin." Man in the world is not only disinherited from Adam's gifts, but with the loss of grace, he also suffers, according to Aquinas, a diminution in "his natural inclination to virtue."

THERE ARE OTHER divisions in the realm of man, but none so radical as that between Eden and the world thereafter. As retold by Plato, the ancient myths of a golden age when men lived under the immediate benevolence of the gods also imply a condition of mankind quite different from the observable reality, but they do not imply a decline in human nature itself with the transition from the golden age to the present. The modern distinction between man living in a state of nature and man living in civil society considers only the external circumstances of human life and does not divide man according to two conditions of his soul. Other dichotomies—such as that between prehistoric and historic man, or between primitive and civilized man—are even less radical, for they deal even more in gradations or degrees of the same external conditions.

These considerations lead us to another phase of man's thinking about man. Where the previous problem was how man differs from everything else in the universe, here the question is how man is divided from man. If men are not equal as individuals, to what extent are their individual differences the result of the unequal endowment of the natures with which they are born, and to what extent are they the result of individual acquirement in the course of life?

The range of human differences, whether innate or acquired, may itself become the basis for a division of men into the normal and the abnormal, a division which separates the feebleminded and the insane from the competent

and sane. From a moral and political point of view, this is perhaps the most fundamental of all classifications. It must be admitted, however, that traditionally the problem of the difference between men and women and the problem of the difference between the ages of man from the extreme of infancy to the extreme of senility seem to have exercised more influence on the determination of political status and moral responsibility.

One other differentiation of man from man seems to have significance for the theory of human society and the history of civilization. That is the division of men into groups, sometimes by reference to physical and mental traits which separate one race from another—whether these traits are supposed to be determined biologically as inheritable racial characteristics or are attributed to environmental influences; sometimes by reference to the customs and ideals of a culture. Both sets of criteria appear to be used in the traditional discussion of the opposition between Greek and barbarian, Jew and gentile, European and Asiatic. But it is only in the 20th century that racial differences within the human species are scientifically treated in physical anthropology and in the handling of the problem in a book such as Dobzhansky's *Genetics and the Origin of Species*.

It is also only in the 20th century that the problem of gender—the problem of male and female in the human species—comes to the fore. Throughout the great books from Homer to the end of the 19th century, the word "man" is used as signifying all members of the human species, never as signifying only males. And with the possible exceptions of Plato in antiquity and Mill in the 19th century, almost all the authors of the great books from Aristotle to Nietzsche regard males as superior to females. Nietzsche is most emphatic on this point. For him, it is a "sign of shallow-mindedness" to deny the antagonism and hostile tension between men and women and "to dream here of equal rights, equal education, equal claims and duties." Even in the early 20th century, Veblen describes the status of women in American society as "that of a drudge . . . fairly contented with her lot."

The woman's suffrage movement, of which Mill was a leading progenitor, achieved success in the first quarter of the 20th century, but the feminist movement did not erupt until the third quarter. Yet earlier than that, we find in Shaw's Preface to *Saint Joan* an extraordinary anticipation of its credo. To understand Saint Joan properly, he writes, it is necessary to throw off "sex partialities and their romance," and to regard "woman as the female of the human species."

THE ULTIMATE questions which man asks about himself are partly answered by the very fact of their being asked. The answer may be that man is the measure of all things; that he is sufficient unto himself or at least sufficient for the station he occupies and the part he plays in the structure of the universe. The answer may be that man is not a god overlooking the rest of nature, or even at home in the environment of time and space, but rather that he is a finite and dependent creature aware of his insufficiency, a lonely wanderer seeking something greater than himself and this whole world. Whatever answer is given, man's asking what sort of thing he is, whence he comes, and whither he is destined symbolizes the two strains in human nature—man's knowledge and his ignorance, man's greatness and his misery.

Man, writes Pascal, is "a nothing in comparison with the Infinite, an All in comparison with the Nothing, a mean between nothing and everything. Since he is infinitely removed from comprehending the extremes, the end of things and their beginning are hopelessly hidden from him in an impenetrable secret; he is equally incapable of seeing the Nothing from which he was made, and the Infinite in which he is swallowed up.

"Man," Pascal goes on, "must not think that he is on a level either with the brutes or with the angels, nor must he be ignorant of both sides of his nature; but he must know both." In recognizing both lies his wretchedness and grandeur. "Man knows that he is wretched. He is therefore wretched, because he is so; but he is really greater because he knows it."