

Mind

INTRODUCTION

IN the tradition of the great books, the word "mind" is used less frequently than "reason," "intellect," "understanding," or "soul." There are still other words, like "intelligence," "consciousness," and even "spirit" or "psyche," which often carry some part of the connotation of the word "mind." Certain authors use "mind" as a synonym for one or another of these words, and give it the meaning which other writers express exclusively in terms of "reason" or "understanding." Some discuss mind without reference to soul, some identify mind with soul or spirit, and some conceive mind as only a part of soul or spirit.

For the purpose of assembling in a single chapter references to all discussions which fall within the area of meaning common to all these terms, it was necessary to adopt some single covering word. Our choice of "mind" is partly the result of its present currency, partly the result of the fact that it is somewhat more neutral than the others and therefore less prejudicial to the conflicting theories which are juxtaposed in this chapter.

Words like "reason" or "intellect" usually imply a sharper distinction between the functions or faculties of sensation and thought than does the word "mind." Imagination and memory, for example, are attributed to the understanding in the writings of Locke and Hume, whereas, in the analytic vocabulary of Aristotle and Aquinas, imagination and memory belong to sense, not to reason or intellect. Similarly, words like "soul" or "spirit" usually connote a substantial as well as an immaterial mode of being, whereas "mind" can have the meaning of a faculty or a power to be found in living organisms.

The adoption of the word "mind" is purely

a matter of convenience. It begs no questions and decides no issues. The relations between what is here discussed and the matters considered in the chapters on SOUL, SENSE, MEMORY AND IMAGINATION, remain the same as they would be if "reason" or "intellect" were used in place of "mind." Different formulations of these relationships are not affected by the words used, but by different theories of what the mind is, however it is named.

Before we consider the diverse conceptions of the human mind which are enumerated under the seven main divisions of the first section in the Outline of Topics, it may be useful to examine the elements of meaning more or less common to the connotation of all the words which "mind" here represents. Even here we must avoid begging the question whether mind is a peculiarly human possession. Other animals may have minds. Mind may be, as it is on one theory, a universal property of matter. According to another theory, there may be superhuman minds or intelligences, or a single absolute mind, a transcendent intelligence.

What, then, does the universe contain because there is mind in it, which would be lacking if everything else could remain the same with mind removed? The facts we are compelled to mention in answering this question should give us some indication of the elements of meaning common to "mind" and all its synonyms.

FIRST IS THE FACT of thought or thinking. If there were no evidence of thought in the world, mind would have little or no meaning. The recognition of this fact throughout the tradition accounts for the development of diverse theories of mind. None of the great

writers denies the phenomenon of thought; however differently each may describe or explain it; none, therefore, is without some conception of mind.

It may be supposed that such words as "thought" or "thinking" cannot, because of their own ambiguity, help us to define the sphere of mind. But whatever the relation of thinking to sensing, thinking seems to involve more—for almost all observers—than a mere reception of impressions from without. This seems to be the opinion of those who make thinking a consequence of sensing, as well as of those who regard thought as independent of sense. For both, thinking goes beyond sensing, either as an elaboration of the materials of sense or as an apprehension of objects which are totally beyond the reach of the senses. To the extent that this insight is true, the elements or aspects of thought discussed in the chapters on IDEA, JUDGMENT, and REASONING have an obvious relevance to the various theories of mind discussed in this chapter.

THE SECOND FACT which seems to be a root common to all conceptions of mind is that of knowledge or knowing. This may be questioned on the ground that if there were sensation without any form of thought, judgment, or reasoning, there would be at least a rudimentary form of knowledge—some degree of consciousness or awareness by one thing of another. Granting the point of this objection, it nevertheless seems to be true that the distinction between truth and falsity, and the difference between knowledge, error, and ignorance, or knowledge, belief, and opinion, do not apply to sensations in the total absence of thought. The chapter on KNOWLEDGE reports formulations of these distinctions or differences. Any understanding of knowledge which involves them seems to imply mind for the same reason that it implies thought.

"The faculty of being acquainted with things other than itself," Russell writes, "is the main characteristic of a mind . . . it is this that constitutes the mind's power of knowing things. If we say that the things known must be in the mind, we are either unduly limiting the mind's power of knowing, or we are utter-

ing a mere tautology." The tautology becomes apparent when "we mean by '*in the mind*' the same as by '*before the mind*,' i.e. if we mean merely being apprehended by the mind."

There is a further implication of mind in the fact of self-knowledge. Sensing may be awareness of an object and to this extent it may be a kind of knowing, but it has never been observed that the senses can sense or be aware of themselves. Take, for example, definitions of sense, or theories of sensation and the objects of sense. Such definitions and theories must be regarded as works of reflective thought; they are not products of sensation.

Thought seems to be not only reflective, but reflexive, that is, able to consider itself, to define the nature of thinking and to develop theories of mind. This fact about thought—its reflexivity—also seems to be a common element in all the meanings of "mind." It is sometimes referred to as "the reflexivity of the intellect" or as "the reflexive power of the understanding" or as "the ability of the understanding to reflect upon its own acts" or as "self-consciousness." Whatever the phrasing, a world without self-consciousness or self-knowledge would be a world in which the traditional conception of mind would probably not have arisen.

THE THIRD FACT is the fact of purpose or intention, of planning a course of action with foreknowledge of its goal, or working in any other way toward a desired and foreseen objective. As in the case of sensitivity, the phenomena of desire do not, without further qualification, indicate the realm of mind. According to the theory of natural desire, for example, the natural tendencies of even inanimate and insensitive things are expressions of desire. But it is not in that sense of desire that the fact of purpose or intention is here taken as evidence of mind.

It is rather on the level of the behavior of living things that purpose seems to require a factor over and above the senses, limited as they are to present appearances. It cannot be found in the passions which have the same limitation as the senses, for unless they are checked they tend toward immediate emo-

tional discharge. That factor, called for by the direction of conduct to future ends, is either an element common to all meanings of "mind" or is at least an element associated with mind.

It is sometimes called the faculty of will—rational desire or the intellectual appetite. Sometimes it is treated as the act of willing which, along with thinking, is one of the two major activities of mind or understanding; and sometimes purposiveness is regarded as the very essence of mentality. Considerations relevant to this aspect of mind are discussed in the chapter on WILL. The understanding of will as intellectual appetite is to be found not only in Aquinas but also in Calvin. Both treat these two faculties of man as conjoined—one a power of reasoning and understanding, the other a power of intention and choice.

THESE THREE OR FOUR FACTS—thought, knowledge or self-knowledge, and purpose—seem to be common to all theories of mind. More than that, they seem to be facts which require the development of the conception. They are, for the most part, not questioned in the tradition of the great books; but they are not always seen in the same light. They are not always related in the same way to one another and to other relevant considerations. From such differences in interpretation and analysis arise the various conflicting conceptions of the human mind.

The conflict of theories concerning *what* the human mind is, *what structure* it has, *what parts* belong to it or *what whole* it belongs to, does not comprise the entire range of controversy on the subject. Yet enough is common to all theories of mind to permit certain other questions to be formulated.

How does the human mind operate? How does it do whatever is its work, and with what intrinsic excellences or defects? What is the relation of mind to matter, to bodily organs, to material conditions? Is mind a common possession of men and animals, or is whatever might be called mind in animals distinctly different from the human mind? Are there minds or a mind in existence apart from man and the whole world of corporeal life?

Such questions constitute the major topics

of this chapter. Other topics which appear here, such as the moral and political aspects of mind, are reserved for discussion in the many other chapters devoted to the great ideas of moral and political thought. Still others, like the problem of insanity—the loss or derangement of mind—are obviously relevant here even though the more general consideration of psychopathology belongs elsewhere, *e.g.*, in the chapter on MEDICINE.

The intelligibility of the positions taken in the dispute of the issues which are here our major concern depends to some degree on the divergent conceptions of the human mind from which they stem. It seems necessary, therefore, to examine the seven notions of mind which appear in the great books. This will at least provide the general context for the reader's further explorations, even if it is not possible to trace the implications each of these notions may have for the great controversial issues.

Seven is, of course, a fiction of analysis. There are, from one point of view, more—perhaps as many as there are, among the great authors, thinkers who have dwelt at length on the subject. From another point of view, there may be fewer than seven, for when the lines are drawn according to certain basic differences, several of these theories appear to be variants of a single doctrine.

"THAT IN THE SOUL which is called mind," Aristotle writes, is "that whereby the soul thinks and judges." For him, as for Plato, the human intellect or reason is a part or power of the soul of man, distinct from other parts or faculties, such as the senses and the imagination, desire and the passions. Though the human soul is distinguished from the souls of other living things by virtue of its having this part or power, and is therefore called by Aristotle a "rational soul," these writers do not identify mind and soul. As soul is the principle of life and all vital activities, so mind is the subordinate principle of knowledge and the activities of thinking, deliberating, deciding.

Within the general framework of this theory, many differences exist between Plato and Aristotle and between them and others who

share their views. These differences arise not only with respect to the soul of which the intellect is a part, but also with respect to the power or activity of the intellect itself. For example, the distinction which Aristotle initiates, between mind as an active and as a passive power, is more explicitly formulated by Aquinas in his theory of the active intellect and the intellect as potential.

The human intellect, Aquinas writes, "is in potentiality to things intelligible, and is at first *like a clean tablet on which nothing is written*, as the Philosopher says. This is made clear from the fact that at first we are only in potentiality towards understanding, and afterwards we are made to understand actually. And so it is evident that with us to understand is *in a way to be passive*." But the forms of things, or what Aquinas calls their "intelligible species," are not actually intelligible as they exist in material things. He therefore argues that in addition to the "power receptive of such species, which is called the *possible intellect* by reason of its being in potentiality to such species," there must also be another intellectual power, which he calls the active or "agent" intellect. Nothing, he says, can be "reduced from potentiality to act except by something in act" or already actual. "We must therefore assign on the part of the intellect some power to make things actually intelligible, by the abstraction of the species from material conditions. Such is the necessity for positing an agent intellect."

The more explicit formulation which Aquinas gives of the distinction between the active and the possible intellects as distinct powers has further consequences for the analysis of three states of the passive or possible intellect distinguished by Aristotle. The intellectual power which is receptive of the intelligible species may either be in complete potentiality to them, as it is when it has not yet come to understand certain things. Or it may be described as in habitual possession of the intelligible species when it has previously acquired the understanding of certain things, but is not now actually engaged in understanding them. In the third place, the potential intellect may also be actual or in act whenever it is actually exercising its habit of

understanding or is for the first time actually understanding something.

In this traditional theory of mind, many other distinctions are made in the sphere of mental activity, but none is thought to require a division of the mind into two distinct powers, or even to require the discrimination of several states of the same power. Just as Plato regards the intuition or direct apprehension of intelligible objects as an activity of the same intelligence which is able to reason discursively about the ideas it can contemplate, so Aristotle and Aquinas assign three different activities to the intellectual power which apprehends intelligible objects, not by intuition, but only as the result of the abstraction of forms from matter by the active intellect.

Once the possible intellect is actualized by the reception of the abstracted species, it can act in three ways. It can express in concepts the species which have been impressed upon it. This—the first act of the intellect—is conception. Its second and third acts—of judgment and of reasoning—consist in forming propositions out of concepts and in seeing how one proposition follows from others in inference or proof.

Unlike abstraction and conception, which Aquinas assigns to the active and the possible intellect respectively, conception, judgment, and reasoning do not, in his opinion, require distinct powers. Nor do the two kinds of thought or reasoning which Aquinas calls "speculative" and "practical." The speculative and practical intellects, he maintains, "are not distinct powers," for they differ only in their ends. The speculative intellect "directs what it apprehends, not to operation, but to the sole consideration of truth"; the practical intellect "directs what it apprehends to operation" or action. But to the nature of intellect as a power of apprehension, "it is accidental whether it be directed to operation or not."

NOT ALL THE foregoing distinctions are made, or made in the same way, by Plato, Aristotle and other authors like Plotinus, Augustine, or Aquinas, who stand together in regarding mind as only a part of the human soul. Lucretius belongs with them on this point, though he

differs radically from them on the issue of mind and matter. Mind, for him, is only "the force that gives direction" to the soul, "the lord and master / Holding dominion over all the body." It is only the thinking or deciding part of the soul. But Plato, Aristotle, and their followers make a distinction in kind between sensations or images and universal ideas or abstract concepts. Sense and intellect are for them distinct faculties of knowing and have distinct objects of knowledge. For Lucretius, on the other hand, thinking is merely a re-working of the images received by the senses. In this one respect at least, Lucretius is more closely associated with the theory of mind to be found in Hobbes, Locke, and Hume.

In the consideration of mind, agreement on one point seems everywhere to be accompanied by disagreement on another. Locke does not agree with Lucretius or Hobbes about the materiality of mind; and though he agrees with Berkeley that mind is a spiritual entity, he does not agree with him, any more than he agrees with Hobbes and Hume, about the abstraction of general concepts from particular sense-impressions. Plato and Aristotle agree that the senses and the intellect or reason are quite distinct, but they do not agree about the relation of these faculties, especially not on the extent to which the mind can act independently of sense and imagination. Augustine seems to share Plato's doctrine of reminiscence as an account of how the senses recall actively to mind ideas it has always somehow possessed. Aquinas adopts Aristotle's doctrine of abstraction as the quite contrary account of the role the senses play in providing the materials on which the mind works to obtain ideas. But Augustine and Aquinas come together on another point in which they depart alike from Aristotle and Plato. They distinguish with precision between the intellect and will as separate faculties of the soul, whereas Plato and Aristotle treat thinking and willing (or knowing and loving) as merely diverse aspects of mental life.

THE SAME SITUATION prevails with respect to the other theories of mind which we must now consider in their own terms. Descartes, for example, resembles Plato and Augustine

on the point on which we have seen that they together differ from Aristotle and Aquinas, namely, the relation of mind or reason to the senses or imagination. Yet he is also closer to Aristotle and Plato in a respect in which they together differ from Augustine and Aquinas, namely, in regarding thinking and willing as acts of the mind rather than as belonging to completely separate faculties.

These agreements and differences occur in the context of a basic opposition between Descartes and all the other writers so far mentioned. Unlike all of them, he *identifies* the human mind with the rational soul of man. In the dual nature of man, he says, "there are certain activities, which we call corporeal, *e.g.*, magnitude, figure, motion, and all those that cannot be thought of apart from extension in space; and the substance in which they exist is called *body* . . . Further, there are other activities, which we call *thinking* activities, *e.g.*, understanding, willing, imagining, feeling, etc., which agree in falling under the description of thought, perception, or consciousness. The substance in which they reside we call a *thinking thing* or *the mind*, or any other name we care, provided only we do not confound it with corporeal substance, since thinking activities have no affinity with corporeal activities, and thought, which is the common nature in which the former agree, is totally different from extension, the common term for describing the latter." Descartes denies that brutes possess thought, but "even though I were to grant," he says, "that thought existed in them, it would in nowise follow that the human mind was not to be distinguished from the body, but on the contrary that in other animals also there was a mind distinct from their body."

The two components of human nature are, according to Descartes, each of them substances—a *res cogitans* or a thinking substance and a *res extensa* or an extended substance. Descartes uses the phrases "rational soul" and "mind" interchangeably. Reason or intellect—the capacity to think—is not a power of the soul. Nor is thinking an act which the soul sometimes performs, sometimes does not. It is the very essence of the soul itself, even as

extension is the essence of body. Just as bodies cannot exist without actually having three dimensions, so the mind cannot exist without thinking.

Though it is literally translated into English by "I think, therefore I am," Descartes's *cogito, ergo sum* can be rendered by "Thinking is; therefore, the mind is," or by the strictly equivalent statement, "The mind exists; therefore, there is thinking." It is precisely this equation of the mind's existence with the activity of thought which Locke challenges. "We know certainly, by experience," he writes, "that we sometimes think, and thence draw this infallible consequence, that there is something in us that has the power to think; but whether that substance perpetually thinks or not, we can be no farther assured than experience informs us . . . I grant that the soul in a waking man is never without thought, because it is the condition of being awake: but whether sleeping, without dreaming, be not an affection of the whole man, mind as well as body, may be worth a waking man's consideration . . . Methinks every drowsy nod shakes their doctrine, who teach that the soul is always thinking."

What is striking about this disagreement is that Locke and Descartes agree in their conception of man as a union of two distinct substances—the union of a material substance or body with a spiritual substance, a mind or soul. It is not surprising, however, that Berkeley should hold the Cartesian view against Locke. Considering the flow of time in terms of the succession of ideas, Berkeley affirms it to be "a plain consequence that the soul always thinks." To try to "abstract the *existence* of a spirit from its cogitation" is, he adds modestly, "no easy task." He might have said it is impossible, for since he holds that bodies do not exist and that man consists of mind or spirit alone, he need not hesitate to assert that the mind cannot cease to think without ceasing to be. Neither he nor Descartes is, in William James's opinion, "free to take the appearances for what they seem to be, and to admit that the mind, as well as the body, may go to sleep."

Despite these differences, Descartes, Locke,

and Berkeley seem to agree on the range of activities within the sphere of mind. The mind is a thinking substance for Descartes, yet it also senses and imagines, suffers passions, and exercises acts of will. What Descartes says in terms of acts, Locke says in terms of powers. Mind has many distinct powers, among which Locke includes all the cognitive faculties (not only the powers of abstract thought and reasoning, but also those of sense and imagination), and such voluntary faculties as choosing and willing. Berkeley also includes the whole range of psychological phenomena—sensation, imagination, memory, the passions, reasoning, and choice.

Hume takes a similar view, though in his case one basic qualification must be added. He does not conceive the mind as a soul or a spirit or any other sort of substance. He even has some difficulty with the notion of its continuity or identity from moment to moment in the flow of experience. Yet, he says, "it cannot be doubted that the mind is endowed with several powers and faculties, that these powers are distinct from each other . . . There are many obvious distinctions of this kind, such as those between will and understanding, the imagination and the passions, which fall within the comprehension of every human creature." What the mind is or how it exists, we may not be able to say; but Hume thinks that "if we can go no farther than this mental geography, or delineation of the distinct parts and powers of the mind, it is at least a satisfaction to go so far."

Descartes's theory of mind seems to serve as a point of departure in another direction from that taken by Locke. Spinoza agrees that the mind is a thinking thing. He agrees that man consists of an individual body united with an individual mind. But he differs from Descartes on the meaning of substance. By its very nature, substance is infinite; and because it is infinite, there can be only one substance, which is God. Finite individual things, whether bodies or minds, do not exist as substances, but as modes of the divine attributes.

"The human mind is a part of the infinite intellect of God, and therefore," Spinoza declares, "when we say that the human mind

perceives this or that thing, we say nothing less than that God has this or that idea." He includes love and desire, as well as perception and imagination, among the affections of the mind, even calling them "modes of thought." He adds, however, that these do not exist apart from the idea of the thing loved or desired, "though the idea may exist although no other mode of thinking exist."

OF THE REMAINING three of the seven conceptions of mind here being considered, two bear certain resemblances to theories already mentioned. Bergson's conception of mind does not seem to be covered by any of the seven mentioned. For him, mind is continually in a state of flux. "There is no state of mind, however simple," he writes, "which does not change every moment."

Hegel's view of the human mind as a phase or dialectical moment of the Absolute Mind or Spirit seems comparable to Spinoza's conception of the human mind as a part of God's infinite intellect. The Hegelian theory of mind, developed in such works as *The Phenomenology of Mind* and *The Philosophy of Mind*, is reflected in his *The Philosophy of History* and in his *The Philosophy of Right*. The expression of his view of mind appears, therefore, in the chapters on HISTORY and STATE, as well as here.

There seems to be similar justification for associating the views of James with those of Locke and Hume. Willing to posit a soul "influenced in some mysterious way by the brain states and responding to them by conscious affections of its own," James goes on to say that "the bare phenomenon, however, the immediately known thing which on the mental side is in apposition with the entire brain-process is the state of consciousness and not the soul itself."

What the soul is and whether it exists belong to metaphysics. So far as psychological observation and analysis are concerned, the phenomena of mind are to be found in the stream of thought or consciousness. States of mind are states of consciousness. James uses the words "feeling" or "thought" to cover every type of mental operation, every state of

mind, every form of consciousness, including sensations and emotions, desires and wishes, as well as conception and reasoning.

Locke and Hume distinguish powers of the mind according to different types of mental operation. James tends rather to analyze the mind in terms of its diverse states according to different types of mental content. But he also lays great stress on the dynamic interconnection of the various elements of consciousness in the continuous flow of the stream of thought.

Freud too presents an analysis of different types of mental content and accompanies it by a theory of the different layers of mind—or psychic structure. He holds, for example, that "we have two kinds of unconscious—that which is latent but capable of becoming conscious, and that which is repressed and not capable of becoming conscious in the ordinary way . . . That which is latent, and only unconscious in the descriptive and not in the dynamic sense, we call *preconscious*; the term unconscious we reserve for the dynamically unconscious repressed, so that we have three terms, conscious (Cs), preconscious (Pcs), and unconscious (Ucs)."

Like James, Freud is concerned with the dynamic interaction of various mental operations or contents. In addition, a further point of similarity exists between them. James says that "the pursuance of future ends and the choice of means for their attainment are . . . the mark and criterion of the presence of mentality . . . No actions but such as are done for an end, and show a choice of means, can be called indubitable expressions of Mind." Freud goes further in the same direction. By identifying "psychic energy in general" with what he calls "libido," he implies that mind in its most primitive form has entirely the aspect of desire or seeking. It expresses itself in "two fundamentally different kinds of instincts, the sexual instincts in the widest sense of the word . . . and the aggressive instincts, whose aim is destruction."

FINALLY, THERE IS the theory in which mind is neither one of the faculties of the soul, nor itself a thinking substance; nor is it a soul

or spirit with a diversity of powers. "All our knowledge," Kant writes, "begins with sense, proceeds thence to understanding, and ends with reason beyond which nothing higher can be discovered in the human mind for elaborating the matter of intuition and subjecting it to the highest unity of thought." These three faculties have distinct functions for Kant. The sensitive faculty is a faculty of intuition. The faculty of understanding is a faculty of judgment and scientific knowledge. The faculty of reason, when properly employed, performs a critical and regulative function in the realm of thought, but when employed beyond the province of its power leads thought into blind alleys or dialectical frustrations.

Mind is not one of these faculties, nor is it the being in which these faculties inhere. The notion of mind seems to have significance, for Kant, primarily in a collective sense. It represents the unity and order of the triad of cognitive faculties. The faculties of feeling and will—which Kant adds to these in his enumeration of "the higher faculties"—belong to the "transcendental ego," but they do not fall within that part of the transcendental structure which is mind. Kant's distinction between the speculative and the practical use of reason, and his distinction between the moral and the aesthetic judgment, involve different relationships between mind—or its triad of faculties—and these other faculties.

THE FOREGOING SURVEY of conceptions of the human mind gives some indication of the way in which other questions about mind are answered.

With regard to the relation of mind and matter, for example, the theories of Descartes, Spinoza, Locke, and James seem to affirm a duality of substances, or of modes of substance, or at least of realms—the physical and the mental. They are confronted by the problem of the relation which obtains between the two—their independence or interaction.

"Mental and physical events," writes James, "are, on all hands, admitted to present the strongest contrast in the entire field of being. The chasm which yawns between them is less easily bridged over by the mind than any inter-

val we know. Why, then, not call it an absolute chasm," he asks, "and say not only that the two worlds are different, but that they are independent?"

James thinks that to urge this theory of the complete independence of mind and body "is an *unwarrantable impertinence in the present state of psychology*." He prefers the common-sense theory that each acts on the other somehow. But earlier writers who consider body and mind as distinct substances, find grave difficulties in the way of conceiving their interaction. "How our minds move or stop our bodies by thought, which we every moment find they do," is, according to Locke, "obscure and inconceivable." According to Hume, there is no "principle in all nature more mysterious than the union of soul with body." He interprets one consequence of the union to be that "a supposed spiritual substance acquires such an influence over a material one, that the most refined thought is able to actuate the grossest matter. Were we empowered by a secret wish, to remove mountains, or control planets in their orbit; this extensive authority," Hume thinks, "would not be more extraordinary, nor more beyond our comprehension."

Denying that bodies exist, Berkeley nevertheless argues that even if they did, they could exert no influence upon mind. "Though we give the materialists their external bodies," he says, "they by their own confession are never the nearer knowing how our ideas are produced; since they own themselves unable to comprehend in what manner body can act upon spirit, or how it is possible that it should imprint any idea in the mind. Hence it is evident that the production of ideas or sensations in our minds can be no reason why we should suppose matter or corporeal substances, since that is acknowledged to remain equally inexplicable with or without this supposition."

Those who deny the existence of matter, like Berkeley, or the existence of anything immaterial, like Lucretius or Hobbes, are confronted by problems of their own. Berkeley must explain the mind's perception of bodies or why the mind thinks of matter. Lucretius must explain perception, thought, and choice as functions of material particles in motion.

The reduction of mind to matter raises a question which leads in the opposite direction. Why may it not be supposed that thought and feeling are present in the universe wherever matter is—an atom of mind inseparably conjoined with every atom of matter, as in the “mind-stuff” or “mind-dust” theory which James considers and criticizes? Still another formulation of the relation of mind to matter is found in the theory of Aristotle and Aquinas, according to whom the rational soul is “the substantial form of an organic body,” but the intellect—one of its powers—is not united to matter in any way. Mind is said to be immaterial in that understanding or thought does not require a bodily organ.

The angelic intellect, according to Aquinas, is a “cognitive power which is neither the act of a corporeal organ, nor in any way connected with corporeal matter.” The human mind is not so completely divorced from matter, for, though man’s intellect “is not the act of an organ, yet it is a power of the soul, which is the form of the body.” Among all bodily forms, the human soul alone has the distinction of possessing “an operation and a power in which corporeal matter has no share whatever.” But Aquinas also maintains that “the body is necessary for the action of the intellect, not as its organ of action, but on the part of the object”—the phantasm or image produced by the sensitive faculty. He conceives this dependence in the following manner. “For the intellect to understand actually . . . there is need for the act of the imagination and of the other powers” that are acts of bodily organs. “When the act of the imagination is hindered by a lesion of the corporeal organ, for instance, in a case of frenzy, or when the act of the memory is hindered, as in the case of lethargy, we see that a man is hindered from understanding actually even those things of which he had a previous knowledge.”

The problem of body and mind is discussed more fully in the chapter on MATTER. Other problems involved in the theory of mind similarly occur in other chapters as well as in this one, e.g., the problem of mind in animals and men (in the chapters on ANIMAL and MAN); the problem of the existence of minds super-

rior to that of man (in the chapters on ANGEL and GOD); the problem of the origin of ideas in the human mind (in the chapters on IDEA and MEMORY AND IMAGINATION). It should be noted, however, that agreement or disagreement on the nature of the human mind does not always determine agreement or disagreement with respect to these other questions.

Sharing the view that the mind is a spiritual substance, Locke and Descartes do not agree about innate ideas or principles. Locke tends to agree with Aristotle when he says that the mind is a *tabula rasa*, “void of all characters, without any ideas. How comes it to be furnished?” he asks. “Whence has it all the *materials* of reason and knowledge? To this I answer in one word, from *Experience*. In that all our knowledge is founded; and from that it ultimately derives itself. Our observation employed either about external sensible objects, or about the internal operations of our own minds, is that which supplies our understandings with all the *materials* of thinking.”

But Locke does not accept Aristotle’s sharp distinction between the faculties of sense and reason, nor does he find it necessary to adopt Aristotle’s notion of an active intellect to explain how the mind abstracts general ideas from the particulars of sense perception. So far as his theory attributes to mind the power of sense, Locke has more affinity with Berkeley and Hume than with Aristotle; yet on the question of abstract ideas or the distinction between men and brutes, he is as much opposed to them as they are to Aristotle.

These few observations may be taken as a sample of the many intricately crossing lines of thought which make the complex pattern of the traditional discussion of mind. With few exceptions, almost any other choice of authors and topics would provide similar examples. That fact, combined with the fact that almost every major topic in this chapter leads into the discussion of other great ideas, tends to make the chapter on MIND a kind of focal point for perspective on the whole world of thought. It is not surprising that this should be the case, for on any theory, mind is somehow the place of ideas or, as Aristotle says, “the form of forms.”