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# Form

## INTRODUCTION

THE great philosophical issues concerning form and matter have never been resolved. But the terms in which these issues were stated, from their first formulation in antiquity to the 17th or 18th centuries, have disappeared or at least do not have general currency in contemporary discourse. Kant is perhaps the last great philosopher to include these terms in his basic vocabulary. The conceptions of matter and form, he writes, "lie at the foundation of all other reflection, so inseparably are they connected with every mode of exercising the understanding. The former denotes the determinable in general, the second its determination."

The word "form" is no longer a pivotal term in the analysis of change or motion, nor in the distinction between being and becoming, nor in the consideration of the modes of being and the conditions of knowledge. The word "matter" is now used without reference to form, where earlier in the tradition all of its principal meanings involved "form" as a correlative or an opposite. Other words, such as "participation" and "imitation," have also fallen into disuse or lost the meanings which derived from their relation to form and matter.

The problems which these words were used to state and discuss remain active in contemporary thought. There is, for instance, the problem of the universal and the particular, the problem of the immutable and the mutable, the problem of the one and the many, or of sameness and diversity. These problems appear in the writings of William James and Bergson, Dewey and Santayana, Whitehead and Russell. Sometimes there is even a verbal approximation to the traditional formulation, as in Whitehead's doctrine of "eternal objects" or in Santayana's consideration of the "realm of essence" and the "realm of matter." Whatever expressions they use, these thinkers find themselves opposed on issues which represent part, if not the whole, of the great traditional controversy between Plato and Aristotle concerning form.

THERE IS A TENDENCY AMONG the historians of thought to use the names of Plato and Aristotle to symbolize a basic opposition in philosophical perspectives and methods, or even in what James calls "intellectual temperaments." Later writers are called "Platonists" or "Aristotelians" and doctrines or theories are classified as Platonic or Aristotelian. It almost seems to be assumed at times that these names exhaust the typical possibilities: that minds or theories must be one or the other, or some sort of mixture or confusion of the two.

If this tendency is ever justified, it seems to be warranted with regard to the problems of form. Here, if anywhere, there may be poetic truth in Whitehead's remark that the history of western thought can be read as a series of footnotes to Plato; though perhaps the observation should be added that Aristotle, the first to comment on Plato, wrote many of the principal footnotes. In Plotinus the two strains seem to be intermingled. The issue between Plato and Aristotle concerning form dominates the great metaphysical and theological controversies of the later Middle Ages, and, with some alterations in language and thought, it appears in the writings of Hobbes, Francis Bacon, Descartes, Spinoza, and Locke, where it is partly a continuation of, and partly a reaction against, the medieval versions of Platonic and Aristotelian doctrine.

The most extreme reaction is, of course, to be found in those who completely reject the term *form* or its equivalents as being without significance for the problems of motion, existence, or knowledge. Bacon retains the term, but radically changes its meaning. "None should suppose from the great part assigned by us to forms," Bacon writes, "that we mean such forms as the meditations and thoughts of men have hitherto been accustomed to." He does not mean either "the concrete forms" or "any abstract forms of ideas," but rather "the laws and regulations of simple action . . . The form of heat or form of light, therefore, means no more than the law of heat or the law of light." But Hobbes and Locke tend to reject the term itself—especially when it occurs in the notion of substantial form—as meaningless or misleading.

"We are told," says Hobbes, "there be in the world certain essences, separated from bodies, which they call *abstract essences, and substantial forms* . . . Being once fallen into this error of *separated essences,* [men] are thereby necessarily involved in many other absurdities that follow it. For seeing they will have these forms to be real, they are obliged to assign them *some place*"; which they cannot succeed in doing, according to Hobbes, "because they hold them incorporeal, without all dimension of quantity, and all men know that place is dimension, and not to be filled but by that which is corporeal."

With regard to *substantial form,* Locke declares, "I confess I have no idea at all, but only of the sound 'form.' " Those "who have been taught . . . that it was those *forms* which made the distinction of substances into their true species and genera, were led yet further out of the way by having their minds set upon fruitless inquiries after 'substantial forms' "—a subject which Locke regards as "wholly unintelligible."

Since form and matter are supposed to be correlative, the denial to form of meaning or reality leads to materialism, as in the case of Hobbes—the affirmation of matter alone as a principle or cause. Materialists of one sort or another are the opponents of both Plato and Aristotle, and of Platonists and Aristotelians. That part of the controversy is discussed in the chapter on MATTER. Here we are concerned with the issues arising from different views of form and its relation to matter.

THE POPULAR meaning of "form" affords an approach to the subtleties of the subject. As ordinarily used, "form" connotes figure or shape. That connotation expresses one aspect of the technical significance of "form." A great variety of things, differing materially and in other respects, can have the *same* figure or shape. The same form can be embodied in an indefinite number of otherwise different individuals. But figures or shapes are sensible forms, forms perceptible to vision and touch. To identify form with figure or shape would put an improper limitation on the meaning of form. This is popularly recognized in the consideration of the form of a work of art—the structure of an epic poem or a symphony—which seems to be more a matter of understanding than of direct sense-perception.

Russell's definition of the form of a proposition effectively illustrates the point involved. The form of a proposition, he says, is that which remains the same in a statement when everything else is changed. For example, these two statements have the same grammatical and logical form: (1) *John followed James,* and (2) *Paul accompanied Peter.* What might be called the matter or subject matter of the two statements is completely different, but both have the same form, as may an indefinite number of other statements.

This illustration helps us to grasp the meaning of form, and the distinction between form and matter, or the formal and the material aspects of anything. It is thus that we understand the phrase "formal logic" to signify a study of the forms of thought or discourse, separated from the subject matter being thought about or discussed. Similarly, abstractionism or surrealism is a kind of formalism in painting which tries to separate visible patterns or structures from their representative significance or their reference to familiar objects.

Kant's doctrine of space and time as transcendental forms of intuition exemplifies the meaning of form as pure order or structure

divorced from sensuous content. "That which in the phenomenon corresponds to the sensation, I term its *matter,*" he writes; "that which effects that the content of the phenomenon can be arranged under certain relations, I call its *form.*" Sometimes the consideration of form emphasizes not its separation from, but its union with matter. The form dwells in the thing, constituting its nature. The sensible or intelligible characteristics of a thing result from the various ways in which its matter has been formed.

It is impossible to say more about the meaning of *form* without facing at once the great controversy between Plato and Aristotle and the difficulties which their theories confront.

PLATO DOES NOT deny that things—the sensible, material, changing things of experience—have something like form. Nor does he deny that the ideas by which we understand the natures of things are like forms. Rather he asks us to consider that which they are *like.*

In the *Phaedo*—only one of the many dialogues in which the doctrine of forms is discussed—Socrates argues that "there is such a thing as equality, not of one piece of wood or stone with another, but that, over and above this, there is absolute equality." Socrates gets Simmias to admit that "we know the nature of this absolute essence," and then asks, "Whence did we obtain our knowledge?" It could not have been obtained from the pieces of wood or stone, Socrates tries to show, because they "appear at one time equal, and at another time unequal," whereas the idea of equality is never the same as that of inequality. Hence he thinks "we must have known equality previously to the time when we first saw the material equals . . . Before we began to see or hear or perceive in any way, we must have had a knowledge of absolute equality, or we could not have referred to that standard the equals which are derived from the senses." The equality which supplies the "standard" by which material equals are measured is the Form or Idea of equality.

What is true in this one case Socrates thinks is true in every other. Whether we consider the "essence of equality, beauty, or anything else," Socrates holds, the "Ideas or essences, which in the dialectical process we define as . . . true existences . . . are each of them always what they are, having the same simple self-existent and unchanging forms, not admitting of variation at all, or in any way or at any time." Apart from the perishable things of the sensible world, and apart from the ideas which are involved in our process of learning and thinking, there exist the Forms or the Ideas themselves—the immutable objects of our highest knowledge.

Because the same English words are employed in these quite distinct senses, it is useful to follow the convention of translators who capitalize the initial letter when "Form" or "Idea" refers to that which is separate from the characteristics of material things and from the ideas in our mind. The words "Form" and "Idea" are interchangeable, but the words "Idea" and "idea" are not. The latter refers to a notion in the human mind, by which it knows; whereas "Idea"—as Plato uses the word—signifies the object of knowledge, *i.e.,* that which is known. These differences are further discussed in the chapter on IDEA.

By imitating the Forms, sensible things, according to Plato, have the characteristics we apprehend in them. The ideas we have when we apprehend the resemblance between sensible things and their Forms (which sensible things exhibit) would seem to be indirect apprehensions of the Forms themselves. When in *The Republic* Socrates discusses knowledge and opinion, he distinguishes them from one another according to a division of their objects—the realm of intelligible being on the one hand, and the realm of sensible becoming on the other. The latter stands to the former as image or copy to reality, and Socrates finds this relationship repeating itself when he further divides each of the two parts. The realm of becoming divides into images or shadows and into that "of which this is only the resemblance," namely, "the animals which we see, and everything that grows or is made." The realm of intelligible being he also subdivides into two parts, of which the first is as an image or reflection of the second, namely, the hypotheses we form in our minds and the Ideas or Forms themselves.

From this it appears that just as we should regard the form of the thing as an imitation of, or participation in, the separate Form, so should we regard the idea we have (that is, our understanding of the thing) as an approximation of the Idea. The Ideas are outside the human mind even as the Forms are separate from their sensible, material imitations. When we apprehend things by reason we know the Forms they imitate; when we apprehend them by our senses we know them as imitations, or as images of the Ideas.

THE PLATONIC THEORY changes the ordinary meaning of the word "imitation." We ordinarily think of imitation as involving a relation of resemblance between two sensible things, both of which we are able to perceive; for example, we say that a child imitates his father's manner, or that a portrait resembles the person who posed for it. The painter, according to Socrates in *The Republic,* is not the only "creator of appearances." He compares the painter who pictures a bed with the carpenter who makes one.

Like the bed in the painting, the bed made by the carpenter is not the real bed. It is not, says Socrates, the Idea "which, according to our view, is the essence of the bed." The carpenter "cannot make true existence, but only some semblance of existence." As the bed in the picture is an imitation of the particular bed made by the carpenter, so the latter is an imitation of the Idea—the essential *bed-ness* which is the model or archetype of all particular beds.

Shifting to another example, we can say that a statue, which resembles a particular man, is the imitation of an imitation, for the primary imitation lies in the resemblance between the particular man portrayed and the Form or Idea, Man. Just as the statue derives its distinctive character from the particular man it imitates, so that particular man, or any other, derives his manhood or humanity from Man. Just as the particular man imitates Man, so our idea of Man is also an imitation of that Idea. Knowledge, according to Plato, consists in the imitation of Ideas, even as sensible, material things have whatever being they have by imitation of the true beings, the Forms.

Another name for the primary type of imitation is "participation." To participate in is to partake of. In the dialogue in which Plato has the young Socrates inquiring into the relation between sensible particulars and the Ideas or Forms, Parmenides tells him that "there are certain ideas of which all other things partake, and from which they derive their names; that similars, for example, become similar, because they partake of similarity; and great things become great, because they partake of greatness; and that just and beautiful things become just and beautiful, because they partake of justice and beauty." The Forms or Ideas are, Parmenides suggests, "patterns fixed in nature, and other things are like them, and resemblances of them—what is meant by the participation of other things in the ideas, is really assimilation to them."

The fact of particularity and multiplicity seems to be inseparable from the fact of participation. That in which the many particulars participate must, on the other hand, have universality and unity. The Forms or Ideas are universals in the sense that each is a one which is somehow capable of being in a many—by resemblance or participation. Parmenides asks Socrates whether he thinks that "the whole idea is one, and yet, being one, is in each one of the many." When Socrates unhesitatingly says Yes, Parmenides points out to him that we then confront the difficulty that "one and the same thing will exist as a whole at the same time in many separate individuals" and that "the ideas themselves will be divisible, and things which participate in them will have a part of them only and not the whole idea existing in each of them." Nor can we say, Socrates is made to realize, that "the one idea is really divisible and yet remains one."

THIS DIFFICULTY concerning the relation of particulars to the Ideas they participate in, is discussed in the chapter on UNIVERSAL AND PARTICULAR. It is not the only difficulty which Plato himself finds in the theory of Ideas. Another concerns the individuality of each of the indefinite number of particulars which copy a single model or archetype. What makes the various copies of the same model different from one another?

Plato meets this problem by adding a third principle. To the intelligible patterns or archetypes and their sensible imitations, he adds, in the *Timaeus,* the principle which is variously named, sometimes "the receptacle," sometimes "space," sometimes "matter." However named, it is the absolutely formless, for "that which is to receive all Forms should have no form . . . The mother and receptacle of all visible and in any way sensible things . . . is an invisible and formless being which receives all things and in some mysterious way partakes of the intelligible, and is most incomprehensible."

It is this material or receiving principle which somehow accounts for the numerical plurality and the particularization of the many copies of the one absolute model. When a number of replicas of the same pattern are produced by impressing a die on a sheet of plastic material at different places, it is the difference in the material at the several places which accounts for the plurality and particularity of the replicas. Yet the one die is responsible for the character common to them all.

The sensible things of any one sort are not only *particular* because the Form they imitate is somehow received in matter; they are also *perishable* because of that fact. The receptacle is the principle of generation or of change. It is, Timaeus says, "the natural recipient of all impressions," which is "stirred and informed by them, and appears different from time to time by reason of them, but the forms which enter into and go out of her are the likenesses of real existences modelled after their patterns in a wonderful and inexplicable manner."

Matter, as Plato here suggests, is the mother of changing things, things which, between coming to be and passing away, are what they are because of the unchanging Forms. The Form which is received in matter for a time makes the changing thing an *imitation,* as the matter in which the Form is received makes the changing thing a *participation.*

The admittedly mysterious partaking of the Forms by the formless receptacle constitutes the realm of becoming, in which being and nonbeing are mixed. But the Forms or Ideas themselves, existing apart from their sensible imitations, are "uncreated and indestructible, never receiving anything from without, nor going out to any other, but invisible and imperceptible by any sense." They constitute the realm of pure being. They are the intelligible reality.

What Plato calls the eternal Forms and treats as the modes of actual being rather than becoming, Whitehead calls eternal objects and treats as modes of possible being. "The metaphysical status of an eternal object," he writes, "is that of a possibility for an actuality. Every actual occasion is defined as to its character by how these possibilities are actualised for that occasion. Thus actualisation is a selection among possibilities."

THE CRITICISM OF the Forms or Ideas which we find in the writings of Aristotle is primarily directed against their separate existence. "Plato was not far wrong," Aristotle says, "when he said that there are as many Forms as there are kinds of natural object"; but he immediately adds the qualification: "if there *are* Forms distinct from the things of this earth." It is precisely that supposition which Aristotle challenges.

Aristotle's criticism of Plato stems from his own notion of substance, and especially from his conception of sensible substances as composed of matter and form. He uses the word "substance" to signify that which exists in and of itself; or, in other words, that which exists separately from other things. Hence, when he says that, in addition to sensible substances, "Plato posited two kinds of substances—the Forms and the objects of mathematics," he is translating the affirmation that the Forms have being separately from the sensible world of changing things, into an assertion that they are substances.

"Socrates did not make the universals or the definitions exist apart," Aristotle writes; but referring to the Platonists, he says, "*they,* however, gave them separate existence, and this was the kind of thing they called Ideas." What proof is there, he repeatedly asks, for the separate existence of the Forms, or universals, or the objects of mathematics? "Of the various ways in which it is proved that the

Forms exist," he declares, "none is convincing." Furthermore, he objects to the statement that "all other things come from the Forms"; for "to say that they are patterns and the other things share in them is to use empty words and poetical metaphors." There is the additional difficulty, he thinks, that "there will be several patterns of the same thing, and therefore several Forms; *e.g.*, 'animal' and 'two-footed' and also 'man himself' will be Forms of man."

Aristotle's denial of separate existence, or substantiality, to the Ideas or universals stands side by side with his affirmation of the place of forms in the being of substances and the role of universals in the order of knowledge. Furthermore, he limits his denial of the substantiality of Ideas to those Forms which seem to be the archetypes or models of sensible things. Particular physical things—familiar sensible substances, such as the stone, the tree, or the man—are not, in his opinion, imitations of or participations in universal models which exist apart from these things. He leaves it an open question whether there are self-subsistent Forms or Ideas—that is, purely intelligible substances—which do not function as the models for sensible things to imitate.

Stated positively, the Aristotelian theory consists in two affirmations. The first is that the characteristics of things are determined by "indwelling forms," which have their being not apart from but in the things themselves. To illustrate his meaning he turns to the realm of art. When we make a brass sphere, he writes, "we bring the form," which is a sphere, "into this particular matter," the brass, and "the result is a brazen sphere." There is no "sphere apart from the individual spheres," and no brass apart from the particular lumps of metal that are brass. "The 'form' means the 'such,' and is not a 'this'—a definite thing," such as *this* individual brazen sphere.

Aristotle analyzes natural things in the same manner. It is from "the indwelling form and the matter," he says, that "the concrete substance is derived." Men such as Callias or Socrates, for example, consist of "such and such a form in this flesh and in these bones," and "they are different in virtue of their matter (for that is different) but the same in form." The flesh and bones of Callias are not the flesh and bones of Socrates; but though different as *individual* men, they are the same as *men* because they have the same form.

The second point is that our understanding of things involves the forms of things, but now somehow in the intellect rather than in the things themselves. In order to know things, Aristotle says, we must have within us "either the things themselves or their forms. The former alternative is of course impossible: it is not the stone which is present in the soul," he maintains, "but its form."

The form in the thing is as individual as the thing itself. But in the mind, as the result of the intellect's power to abstract this form from its matter, the form becomes a universal; it is then called by Aristotle an "idea," "abstraction," or "concept." Forms are universals in the mind alone. If there were a form existing apart from both matter and mind, it would be neither an individual form nor an abstract universal.

The indwelling forms, according to Aristotle, are not universals. Except for the possibility of Forms which dwell apart and bear *no resemblance at all* to sensible things, all forms are either in matter or, abstracted from matter, in the human mind. These are often called "material forms" because they are the forms which matter takes or can take, and which the mind abstracts from matter. Their being consists in informing or determining matter, just as the being of matter consists in the capacity to receive these forms and to be determined by them.

THE FOREGOING helps to explain Aristotle's use of the word "composite" as a synonym for "substance" when he is considering particular sensible things. The independently existing, individual physical things which Aristotle calls "substances" are all composite of form and matter. He sometimes also calls form and matter "substances," but when he uses the word "substance" strictly and in its primary sense, he applies it only to the concrete individual. Form and matter are only principles or constituents of the concrete thing—the composite substance.

The union of form and matter to constitute physical substances also explains the Aristotelian identification of form with actuality and of matter with potentiality; and the relation of form and matter to a third term in the analysis of change, namely, *privation.* As a physical thing changes, its matter gives up one form to take on another. Its matter thus represents its capacity or *potentiality* for form. Matter is the *formable* aspect of changing things. What things are *actually* at any moment is due to the forms they possess. But they may have the potentiality for acquiring other forms, with respect to which they are in *privation.*

"Mutability," Augustine writes, "which belongs to all things that are subject to change, comprehends all the forms which those things take when changes occur in them." Change consists in a *transformation* of *matter,* which is another way of saying that it consists in the *actualization* of a thing's *potentialities.* The Aristotelian theory of form and matter is a theory of becoming as well as an analysis of the being changing things. Illustrative applications of this theory will be found in the chapters on ART, CAUSE, and CHANGE.

Some forms are sensible. Some are shapes, some are qualities, some are quantities. But not all forms are perceptible by the senses; as, for example, the form which matter takes when a plant or animal is generated and which gives the generated thing its specific nature. This type of form came to be called a "substantial form" because it determines the kind of substance which the thing is. In contrast, the forms which determine the properties or attributes of a thing are called its "accidents" or "accidental forms." For example, size and shape, color and weight, are accidental forms of a man; whereas that by virtue of which this thing (*having* a certain size, shape, and color) is a *man,* is its substantial form.

Aristotle's distinction between substantial and accidental form affects his analysis of change and his conception of matter. Generation and corruption are for him substantial change, change in which matter undergoes transformation with respect to its substantial form. The various types of motion—alteration, increase or decrease, and local motion—are changes which take place in enduring substances, and with respect to their accidental forms.

The substratum of accidental change is not formless matter, but matter having a certain substantial form; whereas in the coming to be or passing away of substances, the substratum would seem to be a primary sort of matter, devoid of all form. As indicated in the chapter on MATTER, this, according to Aristotle, is "the primary substratum of each thing, from which it comes to be without qualification, and which persists in the result." He tries to help us grasp prime matter by using an analogy. "As the bronze is to the statue, the wood to the bed," he writes, "so is the underlying nature to substance"—matter absolutely formless to substantial form.

Aristotle sometimes speaks of the substantial form as a first act or actuality, and of accidental forms as second actualities. Accordingly he also distinguishes between a primary and secondary kind of matter—the one absolutely potential, and underlying substantial change; the other partly actualized and partly potential, and involved in accidental change. "Primary matter," Aquinas explains, "has substantial being through its form . . . But when once it exists under one form it is in potentiality to others."

Perhaps one more distinction should be mentioned because of its significance for later discussions of form. Regarding living and non-living things as essentially distinct, Aristotle differentiates between the forms constituting these two kinds of substances. As appears in the chapter on SOUL, he uses the word "soul" to name the substantial form of plants, animals, and men.

BOTH THE PLATONIC theory of the separate Forms and the Aristotelian theory of the composition of form and matter raise difficulties which their authors consider and which become the subject of intense controversy among Platonists and Aristotelians in the Hellenistic and medieval periods.

The Platonic theory faces a question which arises from supposing the existence of an eter-

nal and immutable Form for every appearance in the sensible world of becoming. If the Idea and the individual are alike, then "some further idea of likeness will always be coming to light," Parmenides says to Socrates; "and if that be like anything else, then another; and new ideas will be always arising, if the idea resembles that which partakes of it." Because of this difficulty with the doctrine of participation, Parmenides suggests that it may be necessary to conclude that "the Idea cannot be like the individual or the individual like the Idea." In addition, the relationships of the Forms to one another presents a difficulty. Is the relation of one Form to another, Parmenides asks, determined by the essence of each Form, or by the relationships among the sensible particulars that imitate the Forms in question? Either solution seems to be unsatisfactory because of the further difficulties which both raise.

Yet, after propounding questions of this sort, and multiplying difficulties, Parmenides concludes by telling Socrates why the theory of Ideas cannot be given up. "If a man, fixing his attention on these and like difficulties," he says, "does away with the Forms of things and will not admit that every individual thing has its own determinate Idea which is always one and the same, he will have nothing on which his mind can rest; and so he will utterly destroy the power of reasoning."

The Aristotelian theory has difficulties of its own with respect to the ultimate character of matter apart from all forms. Completely formless matter would be pure potentiality and would therefore have no actual being. It would be completely unintelligible, since form is the principle of anything's intelligibility. Nevertheless, something like formless matter seems to be involved in substantial change, in contrast to the substantially formed matter which is the substratum of accidental change.

The problem of prime matter is related in later speculations to the problem of the number and order of the various forms which matter can take. The question is whether matter must have a substantial form before it can have any accidental form; and whether it can have a second substantial form in addition to a first, or is limited to having a single substantial form, all subsequent forms necessarily being accidental.

Aquinas plainly argues in favor of the unity of substantial form. "Nothing is absolutely one" he maintains, "except by one form, by which a thing has being; because a thing has both being and unity from the same source, and therefore things which are denominated by various forms are not absolutely one; as, for instance, a white man. If, therefore," Aquinas continues, "man were *living* by one form, the vegetative soul, and *animal* by another form, the sensitive soul, and *man* by another form, the intellectual soul, it would follow that man is not absolutely one ... We must, therefore, conclude," he says, "that the intellectual soul, the sensitive soul, and the nutritive soul are in man numerically one and the same soul." In other words, "of one thing there is but one substantial form." It is not only "impossible that there be in man another substantial form besides the intellectual soul," but there is also no need of any other, because "the intellectual soul contains virtually whatever belongs to the sensitive soul of brute animals and the nutritive soul of plants."

The Aristotelian theory also has difficulties with respect to substantial forms as objects of knowledge and definition. The definition which the mind formulates attempts to state the essence of the thing defined. The formulable essence of a thing would seem to be identical with its form. But Aristotle raises the question and his followers debate at length whether the essence of a composite substance is identical with its substantial form or includes its matter as well.

Among his followers Aquinas maintains that, in defining the essence or species of a composite substance, the genus is used to signify the matter and the differentia the form. "Some held," he writes, "that the form alone belongs to the species, while the matter is part of the individual, and not of the species. This cannot be true, for to the nature of the species belongs what the definition signifies, and in natural things the definition does not signify the form only, but the form and the matter. Hence in natural things the matter is part of the species; not, indeed, signate matter, which

is the principle of individuation, but common matter." He explains in another place that "matter is twofold; common and *signate*, or individual: common, such as flesh and bone; individual, such as this flesh and these bones." In forming the universal concept *man*, for example, the intellect abstracts the notion of the species "from *this flesh and these bones*, which do not belong to the species as such, but to the individual . . . But the species of *man* cannot be abstracted by the intellect from *flesh and bones*."

As will be seen in the chapters on ONE AND MANY and UNIVERSAL AND PARTICULAR, the Platonic and the Aristotelian theories of form are equally involved in the great problem of the universal and the individual. Even though they seem to be diametrically opposed on the existence of universals—whether apart from or only in minds—both Plato and Aristotle face the necessity of explaining individuality. What makes the particular that imitates a universal Form the unique individual it is? What makes the indwelling form of a composite substance an individual form, as unique as the individual substance of which it is the form?

We have already noted that both Platonists and Aristotelians appeal to matter as somehow responsible for individuation or individuality, but that only raises further questions. The Platonists conceive matter as the receptacle of all Forms, and so in itself absolutely formless. How, then, can it cause the particularizations which must be accounted for? Since prime matter, like the receptacle, is formless, the Aristotelians resort to what they call "signate matter" or "individual matter" to explain the individuality of forms and substances; but it has been argued that this only begs the question rather than solves it.

THE CORRELATIVE terms *form* and *matter* seem to occur in modern thought under the guise of certain equivalents; as, for example, the distinct substances which Descartes calls "thought" and "extension"—*res cogitans* and *res extensa*—or the infinite attributes of substance which Spinoza calls "mind" and "body." They appear more explicitly in Kant's analysis of knowledge, related as the *a priori* and the *a posteriori* elements of experience. But it is in the great theological speculations of the Middle Ages that the most explicit and extended use of these terms is made, often with new interpretations placed on ancient theories.

The doctrine of spiritual substances, for example, has a bearing on the theory of self-subsistent Forms. The angels are sometimes called "separate forms" by the theologians. They are conceived as immaterial substances, and hence as simple rather than composite. But though Plotinus identifies the order of purely intelligible beings with the pure intelligences, the Christian theologian does not identify the Platonic Ideas with the angels. He regards the angels as intelligences. They exist as pure forms, and therefore are intelligible as well as intellectual substances. But they are in no sense the archetypes or models which sensible things resemble.

Nevertheless, Christian theology does include that aspect of the Platonic theory which looks upon the Ideas as the eternal models or patterns. But, as Aquinas points out, the separately existing Forms are replaced by what Augustine calls "the exemplars existing in the divine mind."

Aquinas remarks on the fact that "whenever Augustine, who was imbued with the doctrines of the Platonists, found in their teaching anything consistent with faith, he adopted it; and those things which he found contrary to faith he amended." He then goes on to say that Augustine could not adopt, but had to amend, the teaching of the Platonists that "the forms of things subsist of themselves apart from matter." He did this, not by denying the ideas, "according to which all things are formed," but by denying that they could exist outside the divine mind. The divine ideas are the eternal exemplars and the eternal types—*types*, Aquinas explains, insofar as they are the likenesses of things and so the principles of God's knowledge; *exemplars* insofar as they are "the principles of the making of things" in God's act of creation.

The profound mystery of the creative act which projects the divine ideas into substantial or material being replaces the older problem of how physical things derive their natures by

participation in the Forms. According to the Aristotelian theory, both natural generation and artistic production involve the transformation of a preexistent matter. According to the Platonic myth of the world's origin, only changing things are created, neither the receptacle nor the Ideas. But the Christian dogma of creation excludes everything from eternity except God.

Ideas are eternal only as inseparable from the divine mind. Being spiritual *creatures,* the angels, or self-subsistent forms, are not eternal. And in the world of corporeal creatures, matter as well as its forms must begin to be with the creation of things. Since matter and its forms cannot exist in separation from one another, the theologians hold that God cannot create them separately. It cannot be supposed, Augustine says, "that God first created matter without form and then gave it form." He goes on to explain this point by the analogy of sound and song. "Song is ordered sound, and although a thing may very well exist without order, order cannot be given to a thing which does not exist . . . We do not first emit formless sounds, which do not constitute song, and then adapt them and fashion them in the form of song." Thus, God must be understood to have made the world of formless matter, but to have created the world simultaneously. God "concreates" form and matter, Augustine holds, giving form to matter's formlessness without any interval of time.

Defending Augustine's interpretation of the passage in Genesis which says that the earth, which God in the beginning created, "was unformed and void," Aquinas argues that "if formless matter preceded in duration, it already existed; for this is implied by duration . . . To say, then, that matter preceded, but without form, is to say that being existed actually, yet without actuality, which is a contradiction in terms . . . Hence we must assert that primary matter was not created altogether formless." But neither, according to Aquinas, can the form of any material thing be created apart from its matter. "Forms and other nonsubsisting things, which are said to co-exist rather than to exist," he declares, "ought to be called *concreated* rather than *created* things."

Aristotle's theory of physical substances as composite of form and matter raises certain special difficulties for Christian theology. Those who, like Aquinas, adopt his theory must also adapt it to supernatural conditions when they deal with the problems of substance involved in the mystery of the Incarnation of the second person of the Trinity and the mystery of transubstantiation in the Eucharist.

Furthermore, Aristotle's identification of soul with the substantial form of a living thing makes it difficult to conceive the separate existence of the individual human soul. Again an adaptation is required. As indicated in the chapters on IMMORTALITY and SOUL, the Christian doctrine of personal survival is given an Aristotelian rendering by regarding the human soul as a form which is not completely material. Hence it is conceived as capable of self-subsistence when, with death and the dissolution of the composite nature, it is separated from the body.