
ONTOLOGY

A Class Manual
in Fundamental Metaphysics

By

PAUL J. GLENN, PH.D., S.T.D.

PROFESSOR OF PHILOSOPHY IN THE COLLEGE OF
ST. CHARLES BORROMEIO, COLUMBUS

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This little book on the Heart of Philosophy
is dedicated with all the heart of the author

To

THE REVEREND DOCTOR JAMES A. W. REEVES,
President of Seton Hill College, Greensburg, Pa.,

*A Priest, a Leader, an Educator, and an Executive,
whose remarkable parts in his official character
have won him wide recognition and acclaim, and
whose personal qualities have impressed themselves
enduringly upon the smaller and dearer circle who
rejoice to call him friend.*

PREFACE

The series of which this book is the eighth volume is meant to serve the needs of the average college student. Like the others with which it now takes its place, this manual is not, therefore, to be regarded as a work for the specialist. It tries to say what it has to say in as direct and clear a manner as possible. It does not attempt to take the teacher's place, nor to do his work for him by listing references, posing questions for study, and suggesting learned readings in a foreign tongue. It steadily tries to remain in character, and endeavors not to overreach itself. Such is this little book. As such it humbly presents itself to student, teacher, and critic.

In claiming directness and clarity, the book makes no claim to such simplicity as is naturally denied by the character of the study presented. A complex study like Ontology cannot be turned into a simple study, even by those whose skill in words amounts to magic, and certainly not by one whose expression can claim no merit beyond straightforwardness and, possibly, bluntness. Simplification, as G.K.C. points out, is far too often falsification. Therefore, the student of this manual must be under no illusion

about its contents; he must not pick it up with the inward assurance that here the mystery of metaphysics will be made clear as day. He must be prepared to grapple with a difficult subject, and must bring to his effort the aid of the manly art of concentration and diligent application. This book has not made his work easy for him, but it has tried not to make it more difficult than it needs to be.

There are few manuals in Ontology available in the English language. With those that do exist the present work, it is felt, is not entirely identical in scope or in purpose. But, without drawing fine distinctions or attempting odious comparisons, it may be said that the present work justifies its appearance by the fact that each fresh presentation of important doctrine has, almost necessarily, features that will render it useful and pleasing to some, possibly to a very few, for whom the older writings have small appeal.

The importance of a thorough grounding in essential metaphysics is stressed in the introductory chapter of the book itself, and must not be dealt with here. But it may be said, surely, that the fact that many of our Catholic colleges omit the subject of Ontology from their list of studies is deeply regrettable. For here is the very heart of philosophy. Without it, a body of studies which includes Logic, Ethics, and Psychology (dragged momentarily from the laboratory into the academic serene) does not appear to

be a pulsating organism or even a very presentable corpse.

It is hoped that this new presentation of very old doctrine,—a presentation that has nothing in the world about it deserving of that cheap epithet “original”,—will be of service to many. Yet if it be of service to but few, it may well stand unashamed before the world in its modest and hopeful dress of vernal green.

P.J.G.

College of St. Charles Borromeo,
Columbus, Ohio.

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INTRODUCTION

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I. NAME

The name *ontology* is made up of two Greek words, to wit, *on* (stem *ont-*; combining form *onto-*) which means "being," and *logos* which is used in compound words to signify "science." Thus the term *ontology* literally means "the science of being."

The word *being* is both a participle and a noun. We find it used as a participle in the sentence, "Being in an agony, he prayed the longer"; we find it used as a concrete noun in the line, "A being breathing thoughtful breath," and as an abstract noun in the statement, "Philosophers discuss the questions of being and becoming." In ontology the term *being* is regularly used as a noun, and most frequently as an abstract noun.

Ontology is sometimes called General Metaphysics, but the terms are not strictly synonymous. Ontology is properly a department of metaphysics, but it includes part of what is known as General Metaphysics and part of what is called Special Metaphysics. We shall accurately determine its scope when we discuss

its definition. We call it Fundamental Metaphysics rather than General Metaphysics.

The term *metaphysics* has a curious history, or, if the history be called in question, it must at least be said that an interesting legend explains the origin of the term. It is said that when Andronicus of Rhodes collected and edited the works of Aristotle, about the year 70 B. C., he grouped together Aristotle's eight books on the natures of things in this visible world and very properly labeled them *ta physika* or "Studies on (material or bodily) Natures." He placed *after* these studies,—and the Greek word *meta* means *after*,—the deep and abstruse studies of Aristotle on the nature and properties of reality in its most general aspects as it is found in non-material being and in non-material modes of being. The latter writings, for want of an accurately descriptive name, were labeled *ta meta ta physika*, that is, "Studies Placed After the Treatises on Material Natures." So the term metaphysics (*meta-physika*) came into existence and use. Now, by almost miraculous good fortune, this name, which originated in the accident of an editor's arrangement of books, suits perfectly the science to which it is applied. For metaphysics treats of that which comes after, or lies beyond, the separate objects grasped by the senses and the sciences which treat of such objects; it is the science which draws these objects,—bewildering as they are in number and variety,—into intelligible unities.

2. DEFINITION

Ontology is *the science of being as such and of created being in its fundamental classifications and its causes.*

a) Ontology is *a science.* That is to say, it is a body of doctrine, set forth in a manner that is systematic, logical, and complete, and it presents reasons to justify its data and to evidence its conclusions. Ontology is a *philosophical science*,—it is part of philosophy, and indeed it is the very heart of philosophy,—because it searches out *the very deepest reasons* for each point of its doctrine, and does not rest satisfied with immediate or proximate reasons which serve the requirements of the non-philosophical, phenomenal, and experimental sciences. Ontology is a *speculative* (or *theoretical*, or *doctrinal*) science, because it presents truth for the mind to possess as an enrichment and an illumination; thus it differs from *practical sciences* (or *directive* or *normative sciences*) which give the mind knowledge that leads directly on to action, to something-to-be-done as the normal fruit of what is scientifically known.

b) Ontology is the science of *being.* By *being* we mean reality. And by *reality* we mean whatever exists or can exist. Anything that now exists, or that has existed in the past, or that will exist in the future, or that can be thought of as existing even though it never actually existed and never will—any such thing is a *reality*, a *thing*, a *being.* Any such thing *has be-*

ing, that is, it has existibility. Since ontology deals with being or reality, it belongs to *real* philosophy, and is distinguished from *mental* philosophy (Logic) which studies exactness in reasoning, and from *moral* philosophy (Ethics) which treats of the rightness of human conduct. Further, ontology deals with being in its most general, abstract, and fundamental phases, and hence does not engage directly in the investigation of *bodily* reality which is discussed in *natural* philosophy (Cosmology and Psychology); it is rather the science of *non-bodily* being, that is, of being as such, not as limited to the bodily order.

It will be valuable to set down a diagram of philosophy and to notice the place of ontology among the philosophical sciences. (See the diagram on page 5.)

It will be seen from the diagram that we reject the division of philosophy introduced by Christian Wolff (1679-1755) and adopted almost universally since his time. Wolff made Cosmology, Psychology, and Theodicy, departments of special metaphysics. But Cosmology and Psychology, while they are *philosophical* sciences, are not *metaphysical* sciences; they belong to philosophical physics, not to metaphysics. We retain, with slight modification, the ancient Aristotelian division of philosophy, and assign to ontology (a science so named in comparatively recent times) part of *general* and part of *special metaphysics*. We feel justified in calling ontology *fundamental metaphysics*.

c) Ontology is the science of being *as such*, or of being *formally considered*. The world about us is full of many and various bodily things. Add to these the realities that are non-bodily. Add to existing things, bodily and non-bodily, all things that *could* exist. The field of knowables thus surveyed, is seen to be overwhelming. Yet all these things are at one in this: they are all *things*; each of them is a *something*, a *reality*; each of them *has being*. Taken out of their concrete setting; abstracted from material conditions and individual determinants, all things thinkable are brought together for the mind's consideration in the idea or concept of *being*. Ontology views reality in the light of this idea or concept. It studies *being* in its most general aspects, classifications, principles, and properties. Ontology is thus the science of being *as such*, not of this or that class of bodily being, nor of the class called spiritual being, but of *being simply as being*.

d) Ontology is the science of being as such *and of created being in its fundamental classifications and its causes*. Inasmuch as ontology is the science of *being as such* it belongs to general metaphysics. Inasmuch as it investigates the basic classes (categories) and the causes of *created* being it takes in a portion of special metaphysics. For this reason it is inaccurate to speak of ontology simply as general metaphysics. It is certainly permissible, however, in view of the basic im-

portance of its subject-matter, to call it fundamental metaphysics.

3. OBJECT

Every science has a twofold object. The subject-matter, the field of inquiry, is called *the material object* of the science. Thus the material object of ontology is *being*. In this, ontology may be said to have a fundamental agreement with every science, for each science deals with some sort or some phase of being. Logic deals with mental being, ethics with moral being, metaphysics and natural philosophy with real being, the laboratory sciences with real, material, individual being.

The special aim, the end-in-view, the point-of-approach, the special focus in the field of the subject-matter (or material object) which marks a science is called its *formal object*. Ontology treats of being (its material object) to discover and apprehend ultimate, basic, unifying concepts (such as *being* itself, *substance*, *cause*, *quality*, etc.) into which bodiliness or materiality does not essentially enter. Hence we say that the formal object of ontology is *non-material real being in its basic and most general aspects*. On the score of this formal object, ontology is distinguished from natural philosophy and from every other science. Sciences are ultimately distinguished

one from another by their respective formal objects.

Now, real being may be non-material in one of two ways: either it is a substance with nothing bodily in its make-up or essential relationships (for example, God, angel, soul), or it is an essence abstracted from materiality. A tree is a concrete, bodily object; it is *material*. But the essence *tree* as it exists in the mind of one who knows what *tree* means (that is, as it exists in the *idea* or *concept* of tree) is *non-material*; it has been abstracted or drawn out from the materiality of concrete existence by the knowing-operation of the mind. The concrete tree has its own size, shape, location, etc. But the idea or concept *tree* (that is, the essence *tree* grasped by the mind) is not limited by determinate size, shape, or location. The intellectual grasp of what a tree is, is the concept of tree *as such*; it represents in the mind the essence which constitutes any tree, every tree, big or little, here or there, actual or merely possible. Thus the concept or idea *tree* represents *an essence abstracted from materiality*, an essence, therefore, which is *non-material*.

Ontology deals with non-material real being, but is not directly concerned with individual beings such as angel or tree. It deals with the ultimate general facts and truths to which real being is reducible and in which real being is unified for the adequate grasp of the mind. Hence ontology deals with such concepts as *being, substance, accident, quality, relation, cause,*

etc., and with the *general rational principles* (or fundamental guiding truths) which the study of such things makes clear to the mind.

To sum up. The material object of ontology is *being*. The formal object of ontology is *non-material real being in its basic and most general aspects*. We might put the statement of formal object in another way, and say that the formal object of ontology is *the non-materiality of real being*.

4. IMPORTANCE

Ontology is the most fundamental of philosophical sciences. It studies the ultimate principles of all things. It investigates the very heart of reality. Rightly did Aristotle call it "first philosophy." Without the service of this science the other departments of philosophy could not justify their existence as true sciences. Nay, without ontology, the mathematical sciences, and even the laboratory sciences so much cultivated in our time, are incomplete and insecure. For all these sciences presuppose ontology, and, while they have completeness in their own respective spheres, they are like buildings without foundation or like objects floating in the void unless they are grounded and moored upon the solid ultimate reality which ontology investigates. The biologist, the chemist, the mathematician, and all other scien-

tists, are ever looking for causes and effects, for explanations and fixed formulae, for common factors, for identifying marks and characteristics. But without ontology there is no scientific understanding of the meaning and value of *cause, effect, relation, identity, unity*. The scientist is a philosopher in spite of himself; consciously or unconsciously he holds some philosophy of being; his work is valuable in proportion to the truth of his ultimate principles. Ontology as the true philosophy of being is therefore of first importance.

Ontology studies and evidences the basic principles which bring into harmonious and fruitful union the findings of the separate and partial sciences, and thus it crowns and perfects the labors of scientist and philosopher alike. Further, it satisfies the craving of the human mind for unified knowledge and a clear view of reality in a various and complex universe. Ontology is, in consequence, a study of the first importance.

5. DIVISION

Ontology studies being, the principles involved in being, the properties of being, the classification of created being considered in itself and in its causes. Our study presents all these topics in the following Books and Chapters:

INTRODUCTION

II

BOOK FIRST

Being

Chapter I. The Idea of Being

Chapter II. Primary Determinations of Being

BOOK SECOND

Properties of Being

Chapter I. Transcendental Properties of Being

Chapter II. The Most General Properties of Being

BOOK THIRD

Classification of Being

Chapter I. The Supreme Classes of Being

Chapter II. Beings in Their Causes

BOOK FIRST

BEING

This Book studies the meaning of the term *being*, discusses the idea or concept of being, investigates the manner in which the idea applies to things, and discerns the fundamental principles involved in the idea. Further, the Book discusses the object of the idea *being* (that is, being itself) in its primary determinations as real or logical, actual or potential, as essence and existence. The Book is divided into two Chapters:

Chapter I. The Idea of Being

Chapter II. Primary Determinations of Being

CHAPTER I

THE IDEA OF BEING

This Chapter studies the meaning of the term and concept *being*. It investigates the manner in which *being* is predicated of its inferiors, that is, the way in which the idea *being* is applied to, or affirmed of, things. The Chapter is divided into two Articles:

Article 1. Ideas and Their Inferiors

Article 2. The Idea of Being and Its Inferiors

ARTICLE I. IDEAS AND THEIR INFERIORS

- a) Ideas
- b) Universal Ideas
- c) Inferiors of Ideas
- d) Transcendental Ideas

a) IDEAS

An *idea* (called also *concept* or *notion*) is the essential presence of a thing in the mind; rather, it is the re-presence or representation in the intellect of the essence of a thing. Now, the essence of a thing is what constitutes the thing in its fundamental reality as *such a thing*; essence makes the thing precisely what it is in its specific kind. That, for example, which makes a man a man is the essence of man, that is, the essence of human being. It is not his age, nor his sex, nor his nationality, nor his fatness, nor his learning, nor his innocence of crime, nor his standing in the community. That which makes

him a man is his man-ness, his human-ness ; it is the *essence* man, and nothing else. Again, that which makes white paint white is not the substance of paint, nor its thickness or thinness or chemical composition ; it is its whiteness ; it is the essence of being white, and nothing else. All this may seem so evident as to make discussion about it merely silly. But the discussion is not silly ; it is rather subtle, and vastly important. In things of the mind, obviousness is often the cloak of what is most profound.

An idea, then, is an essence present in the mind. Of course, an essence is, first and foremost, present in the thing which it constitutes. It is re-present (it is there by representation) in the mind which knows that thing. An essence makes a thing (substantial or accidental) precisely *the specific kind* of thing that it is. Everything has its essence. We must now notice how essences, which are present in things, come to be re-present in the human mind or intellect.

There is nothing in the mind that did not come there from without. No ideas are inborn in the mind. And everything in the mind made its first entrance there through the doorways called *the senses*. All human knowledge begins with the knowing-action of the senses, that is, with *sense cognition* or simply *sensation*. All human knowledge *begins* with sensation ; it does not *end* there indeed, but it begins there. Once sensation has done its work, the mind employs its own native power upon sense-findings and rises

to knowledge that is far beyond the reach of the senses themselves; the mind rises to the formation of ideas, judgments, reasonings, and comes to grips with reality in all its phases, with things spiritual as well as things material, and even touches the infinite. But the mind cannot, in this earthly life, rise to its proper sphere of superior knowledge without the ground of sense-findings from which to rise. The essences of things come to be present in the mind by the activity of the mind working on what is grasped by the senses.

Now, to be knowable by any of the senses, an object must be a concrete, material, individual reality, suitable to impress itself upon the organ of sense, and situated within range of the sense-action under due conditions. Thus, the tree which I see from my window is *visible*, and I *see* it, because it is a concrete, material, individual reality, suitable to impress the normal sense of sight, and present within range of my vision under due conditions of light and distance. My sense-grasp (in the present instance, my vision-grasp) of the tree is *a sensation* or a sense-activity, and it arouses in me the knowledge or sentient awareness of the tree. By this sensation I am aware of the tree as an object of a certain color, shape, size, and location. My sensation thus brings me knowledge or awareness of four distinct realities (viz., color, shape, size, location). Each of these awarenesses is *a percept*. Sensations and percepts are,

in themselves, concrete and bodily experiences.

But while human knowledge is founded upon sensations and percepts, it is by no means limited to these. Man has a higher knowing-power than that of the senses. Man has *intellect* or *mind* or *understanding*,—three names which we use as entirely synonymous. By intellect man rises from percepts and sensations (which are sense-grasps of material objects in concrete singularity) to *concepts* or *ideas* (which are mind-grasps of essences in abstract universality). This process of rising from sense-findings to ideas must be briefly illustrated.

In early life I learned, for example, what a tree is. I saw individual trees. I learned that, however different individual trees are in point of size, botanical class, coloring of foliage, shape and flavor of fruit, location, age, general appearance, there is no difference whatever in what makes each one of them a tree. My mind adverted to this identical element (identical, that is to say, *in kind*) in all trees, leaving out of account the individual and individuating elements that neither make the tree what it is nor prevent it from being what it is, but merely affect it in its individual and concrete existence. This activity of my mind is called *abstraction*; for I abstract from, prescind from, leave out of account, the non-constituting material and individual facts and features of trees in their singularity and concreteness, and focus upon that which, in each tree, makes it *a* tree. Thus I rise from

the sense-knowledge of this or these trees to the mind-grasp of what *tree as such* means. In other words, I come to know intellectually *the essence tree in universal*; I come to understand what makes a tree a tree. Not that I am at once capable of reflexly analyzing my mind-grasp or *idea* or *concept* of tree, and of putting in clear and unmistakable terms the explanation of what it is that makes a tree a tree. No, not reflexly but directly I come to know what *tree* means,—and not this or that or these trees, but any and every tree that ever was or will be or could be. Thus when I have once formed the idea of tree, the essence which is present in each tree individually is henceforward re-present in my mind universally. This essence is present in each tree individually and concretely; it is re-present in my mind universally and abstractly.

Possessed now of the idea or concept *tree*, I look into my garden and see the tree that first caught my attention as I looked from the window. By my mind I know it as *tree*, and then, by a kind of reflex act of the mind wherein I realize that this object squares with my already formed idea of *tree*, I know it intellectually as *this tree*, as *this individual tree*. I notice other trees, farther off in the garden. No two of them are alike in any material and non-essential point. One is a large apple tree, another a small peach tree, a third is a majestic elm, a fourth is a dwarf pine. Yet each of these, despite individual differences,

has that essence which I hold re-present in my mind in the idea *tree*. The very differences which make the sense of sight able to distinguish tree from tree are left out of account by the mind in its simple grasp of what *tree as such* means. The mind, as we have said, *abstracts* from these differences to grasp the essence which, in each and every tree, constitutes it in basic reality as this specific kind of thing; the mind thus knows the essence tree *in universal*.

All this illustrates what we mean when we say that *an idea is the re-presence or representation in the mind of the essence of a thing conceived abstractly and in universal*.

b) UNIVERSAL IDEAS

We have just seen that an idea is a mental or intellectual grasp of an essence *in universal*. The term *universal* comes from the Latin *unum-versus-alia*, a phrase which may be loosely translated as "one thing in contradistinction to other things." An idea is "one thing." It is a single representation in the mind of the essence of a reality. And an idea stands representatively related (and hence "in contradistinction") to "other things," that is, to the realities which have, or can have, the essence represented by the idea. Thus the idea *tree* is one thing; it is a single representation of a single essence. And it stands in contradistinction to all actual and possible trees, that is, to all the realities that have, or can have, the essence which

it represents. Thus is the idea *tree* truly universal.

A universal idea represents in the mind a single essence which may be found actualized in a plurality of individual realities outside the mind or "in nature" as the expression is. In the familiar Latin phrase, a universal idea represents or makes represent to the mind *unum quod potest inesse pluribus*, that is, "one thing (one essence) which can be present in a plurality of individuals."

Now an idea *as such* is universal. When we speak of an idea as *singular* (as the idea of "this tree"), or *particular* (as the idea of "some trees"), or as *indefinite* (as the idea of "trees"), we merely qualify the universal idea *tree* to restrict its application to one or several objects. In itself and as such, the idea is universal. In its *use*, it may be applied to one, or a few, or some, or most, or all of the objects which have the essence represented in the mind by the idea. Even when there is and can be only one object which has the essence represented by the idea,—as, for instance, in the idea of *God*, or of *infinity*, or of *my father*, or of *the earth*,—it is still true that the mind first grasps the object and first forms the idea which represents the essence *as though there were or could be a plurality of such things*. The mind of man is imperfect, finite, limited; and in dealing with limitless reality, as in the ideas *God* and *infinity*, it is forced by its limitations to conceive in universal what is and must be actually singular. We must make universal

our idea of God, even to clarify our knowledge that there can be but one God; and we prove this knowledge true by analyzing the question, "Can there be a plurality of *Gods*?" We deal with the object in plural, even to understand that it actually can have no plural. Similarly, we establish the unique character of *infinity*, by showing, or realizing within ourselves, that a plurality of *infinities* is self-contradictory and unthinkable. In dealing with such singular objects as *my father* and *the earth*, we merely apply the universal ideas of *father* and *planetary body* in relations which make them singular. We repeat: an idea as such is universal, even though study and reflection may show that the idea applies to one object only, that is, that only one reality has, or can have, present within it the essence which the idea makes re-present in the mind.

An idea is universal; but to be *definitely and explicitly* universal the mind must apply it in full scope to all the objects that can have the essence it represents. And when an idea is expressed in words (that is, in *terms*) it must, to be explicitly universal, have some such word in the expression as *each, every, all*. Lack of such definiteness in expression leaves the idea *indefinite*. Definite application of the idea to some, but not all, of the objects which can have the essence it represents, makes the idea *particular*; and particularity is expressed by the aid of such words as *some, few, several, most*. Definite application of the idea to one individual makes the idea singular; and

singularity or individuality finds expression in such words as *this, that, one, a certain*, and in possessive singulars like *my, your, his*, etc., and in proper names, such as *George Smith*. In a word, an idea as such is universal, but in use or application it may be (explicitly or implicitly) universal, particular, indefinite, or singular.

c) INFERIORS OF IDEAS

We have spoken of the use or application of ideas. Now, an idea is *applied* when it is viewed with reference to the things that have, or can have, the essence which it represents in the mind. These things are *subjected* to the application of the idea; and they are called its *subjects*. In a more ancient terminology, the subjects of an idea are called its *inferiors*.

An idea in the mind is universal; it is the grasp of an essence in universal. Things outside the mind (things "in nature") which can have the essence represented by the idea are the *inferiors* of the idea. Further, one universal idea may be predicable of other less universal ideas; and so the universal idea of larger scope may have, in the mind itself, lesser universal ideas as its *inferiors*. And thus the inferiors of a universal idea are, first of all, the less universal ideas which are mentally contained within its scope, and, secondarily, the objects "in nature" (that is, realities outside the mind) which have the essence which the idea represents.

Thus, the idea *animal* is a universal idea. Its inferiors are, first, the less extensive universal ideas of *rational animal* and *non-rational animal*; further, the inferiors of *animal* are all men and beasts, actual and possible. Take another example: the universal idea *tree*. It represents an essence that is to be found in all possible trees, in each and every individual tree that exists or can exist. All these individual trees are individual *inferiors* of the universal idea *tree*.

Now, the sum-total of the inferiors of an idea constitutes what is called the *extension* of the idea or its *denotation*. In other words, the inferiors of an idea are the things to which the meaning of the idea *extends*; they are the things which the idea *denotes*. Thus, as we have seen, all trees, actual and possible,—trees that have existed, now exist, will exist, or could exist although they never will,—constitute the *extension* or *denotation* of the idea *tree*.

The intrinsic make-up of the idea itself, considered without explicit reference to the inferiors taken extensively, is called the *comprehension* or the *connotation* of the idea. Most ideas are composed or compounded; they are made up of other ideas simpler than themselves. Indeed, there is only one absolutely simple and uncompounded idea, and this is the idea of *being*. All other ideas begin with *being* as their first constituent element or “note.” The ideas that come together (beginning with that of *being*) to make up a compound idea are called the “notes” of the idea

which they constitute. The comprehension or connotation of an idea is the sum-total of "notes" that make it up. Consider an example: the idea *animal* is compounded or composed of five notes or "constituent ideas," to wit, the ideas of *thing* or *being*, *substance*, *body*, *organism*, *sentiency*. These notes constitute the comprehension or connotation of the idea *animal*. To be what it is, to mean what it means, the idea *animal* must *comprehend* (that is, take in) and *co-note* all these five notes and no others.

The comprehension of an idea is its own intrinsic make-up. The extension of an idea is the group of realities (or, it may be, the single reality) to each member of which the idea applies, and of which it is "predicable." Comprehension is intrinsic to the idea; you cannot drop or change one note, or add a new one, without changing the idea itself. Extension is extrinsic to the idea; you can increase or diminish the number of actual things to which the idea applies (or of which it is predicable) without in the least changing the idea itself. Thus the idea *animal* would remain precisely what it is, it would mean precisely what it now means, if all existing animals were killed tomorrow. But the idea *animal* would not remain the same if you dropped one of its constituent notes,—say "sentiency,"—for then the idea would not *mean* what it now means; it would not then represent the essence which it now represents; it would be, in fact, another idea altogether and not the idea *animal* at all.

A homely illustration may make clear the distinction between the comprehension and the extension of an idea. Consider a little "skull cap" such as collegians of an older day fondly affected. The cap is made of six triangular pieces of cloth. Let the cap stand for the idea itself. Then the six pieces of cloth which make the cap will represent the notes or constituent ideas which make up the idea under consideration. The six pieces of cloth thus represent the *comprehension* of the idea. Now, the individual heads which the cap is made to fit will stand for the *extension* of the idea; these individual heads are the *inferiors* of the idea or its *subjects*; they are subjects because of them the idea can be *predicated*; to them it can be *applied*. Now consider this illustration in the case of the idea *man*, that is, the idea *human being*. The idea *man* means one kind of thing; it represents one essence in the mind. Yet the idea is composed of other ideas in such wise that *one specific kind* of essence is represented. Just so, the cap is cloth, made of distinct pieces of cloth, in such wise that it will perfectly fit only one definite shape of head. The essence *man*, represented in the idea *man*, is a thing or *being* as all essences are; it is a *subsistent* thing, a *bodily* thing, a *living* thing, a *sentient* thing, a *rational* thing. Here then are the six pieces of cloth for the cap: being, subsistent, bodily, living, sentient, rational. Now find what heads this cap will perfectly fit, for these, and no others, will constitute the ex-

tension of the idea *man*. We find that the cap will fit every existent and existible human being, every man, woman, boy, girl, baby, that ever existed, now exists, will exist, or could exist were the Creator to bestow existence. All human beings, therefore, all human individuals actual and possible, are the *inferiors* of the idea *man*; they are the *subjects* of which this idea is *predicable*. Taken collectively, these inferiors constitute the extension of the idea *man*.

Now, sometimes the inferiors of an idea, while necessarily at one in possessing the essence which the idea represents, are not at one in further essentials. Thus all bodily things have the essence *body*; all are subsistent, corporeal realities; all come under the application or predication of the idea *body*, and they come together to make up the extension of that idea. But some bodies are more than mere bodies; these have the essence *body*, of course, else they would not be inferiors of the idea *body*; but they have a further essence; they are bodies "plus." One is not more of a body than another; on the score of being bodies all are equal, and if the mind adverts to them as bodies, that advertence is complete in so far as bodiliness is concerned. But in addition to being bodies, some corporeal beings are *living* bodies, and some are *non-living*. Of living bodies, some are plants, some are non-rational animals, some are human beings. All these things are truly represented in the mind by the idea *body*; all are equally the subjects or inferiors of

that idea. But the idea *body*, while it expresses the essence of all bodies (lifeless, living, vegetal, animal, human) completely inasmuch as it completely differentiates them all from beings that are non-bodily, does not express completely the essence of bodies as distinct (essentially) among themselves. The stone, for example, is a body; no more. The plant is a body; more, it is a living body. Plant is all that stone is, in positive reality, and something essential in addition. The idea *body* goes the whole way, positively speaking, with stone, but not with plant. The idea *body* applies to stone and to plant equally and with the same meaning, but it does not reach the complete and positive expression of the whole essence of plant. Nor, for that matter, does it completely express the essence of stone as non-living; for this negative note (i. e., *non-living*) is not expressed in the idea *body* taken simply; the idea *body* suggests nothing about the presence or the absence of life in its inferiors. In a word, *body* represents the essence of its inferiors (when these are viewed as distinct from one another) *in an incomplete manner*. To have a complete expression of these inferiors inasmuch as they are fundamentally and essentially distinct, we have need of two more definite ideas, each involving *body* as a common essence, and respectively adding to it, one positively and the other negatively, the further essential notes required for completeness. We have need of the ideas *living body* and *non-living body*. Then, tak-

ing *living body* which completely represents all plants, brutes, and men, inasmuch as these beings are marked off essentially from lifeless bodies, we discern the need of further distinguishing this idea (i. e., *living body*) to indicate the essential difference of living bodies among themselves. And so we distinguish in living bodies those that have sentiency (that is, those that are equipped to gain knowledge by the use of a sense or of senses) and those that lack it; thus *living body* or *organism* is distinguished as *sentient organism* and *non-sentient organism*. Animals and men are sentient organisms; plants are non-sentient organisms. Further, sentient organisms are essentially differentiated, and the idea *sentient organism* or *animal* must be distinguished as *rational animal* (that is, animal endowed with understanding and will, viz., *man*) and *non-rational animal*. Viewing the idea *rational animal* or *man*, the mind discerns that this idea expresses an essence in ultimate completeness; there are no human beings "plus"; human beings differ in many non-essential ways, but not in a single essential way.

An idea which expresses the essence of its inferiors *incompletely* is called the *genus* (or, more properly, the *generic idea*) of its inferiors. An idea which expresses the essence of its inferiors *completely* is called the *species* (or, more exactly, the *specific idea*) of its inferiors. The whole group of the inferiors of a generic idea is called a *genus*; the group of inferiors

of a specific idea is a *species*. Thus the idea *body*, inasmuch as it completely defines its inferiors as distinct from beings that are non-bodily, is a *species* or *specific idea*; it is a species of the genus *substance*. But the same idea *body*, inasmuch as it incompletely defines its inferiors as essentially different among themselves, is a *genus* or *generic idea*, and is distinguished into the two species, *living-body* and *non-living body*.

The chief classification of ideas as applicable to inferiors (or "predicable of subjects") is that which distinguishes them as *genera* and *species*. This classification is both a *logical* (or *mental*) one and a *real* one; that is to say, the terms *genus* and *species* are used to signify *ideas* and also the *realities* which make up the extension of the ideas. As we have already noticed, accuracy would indicate that we use the terms *genus* and *species* for the realities, and the terms *generic idea* and *specific idea* for the ideas in application to their inferiors. But it is the common practice to use the simple terms *genus* and *species* for both logical and real classification. This practice is justified by its convenience, but we must keep clear minds and make clean distinctions if we follow it. In passing, the student is advised to contrast our *philosophical* use of the terms *genus* and *species* with the *scientific* use of the same terms by biologists and botanists.

Each genus is "subdivided" into two species. That is, each genus represents that essence which two

The trunk of the tree (which, by the way, appears to be growing upside down) is a line of genera or generic ideas: *substance, body, organism, animal*. The branches on either side of the trunk stand for species or specific ideas. Each genus, beginning with *substance* (which is *the supreme genus*) is distinguished into two species; each species is constituted by the genus just above it (called *the proximate genus* in each respective case) plus *the specific difference*. Thus the species *living body* is constituted by the proximate genus *body*, and the specific difference *living (being)*. Each species becomes a genus with respect to its inferiors when viewed in their essential differences, until a species is reached which admits no such differences among its inferiors. Each genus is *proximate* to the species into which it is immediately distinguished, and *remote* to the species further down the tree. Thus the genus *body* is proximate to the species *living body* and *non-living body*, but *body* is the remote genus of *animal* and *man*. Conversely, the species *man* is referred to *animal* as its proximate genus, and to *organism, body, and substance*, as its remote genera. *Man* is the ultimately differentiated species, and cannot be a genus, for its inferiors are not essentially (or specifically) distinguished. We may classify human individuals and list them in groups according to talent, culture, nationality, religion, color, political preferences, and so on, but such

classification is never essential; it is non-essential or *accidental*.

A somewhat simpler presentation of "the subordination of genera and species" is the following:

$$\text{Substance} \left\{ \begin{array}{l} \text{non-bodily} \\ \text{bodily} \dots \end{array} \right\} \left\{ \begin{array}{l} \text{non-living} \\ \text{living} \dots \end{array} \right\} \left\{ \begin{array}{l} \text{non-sentient} \\ \text{sentient} \dots \end{array} \right\} \left\{ \begin{array}{l} \text{non-rational} \\ \text{rational} \end{array} \right.$$

This schema shows clearly how each species becomes the proximate genus of its inferiors until the last or ultimate species is reached; this ultimate species applies to (or is predicable of) inferiors which are not essentially (or specifically) distinguished one from another, for all have the same completely rounded essence; these inferiors are distinguished only *as individuals*, or, to use an ancient technical phrase, "these inferiors are not *specifically*, but only *numerically*, distinct."

d) TRANSCENDENTAL IDEAS

An idea is predicable of its inferiors because it represents in the mind (completely, if a species; incompletely, if a genus) the essence which is present in each and every one of its inferiors. An idea (which, as such, is *universal*) thus applies in a definite field; it is applicable to its own inferiors, and *not* applicable to the inferiors of a different idea. Thus the idea *body*, although it is of vast extension and includes as inferiors all corporeal realities, has clear-cut limits

by which it is marked off from fields in which it does not apply. It is marked off from the field of non-subsistent realities and from the field of spiritual substances.

A universal idea is, therefore, held within bounds. It has a determined field of application, a circumscribed group of inferiors. And there are inferiors of other ideas which are not in its field but in their own. Now, a *transcendental idea* (named from the Latin *transcendens*, "climbing over," "crossing over," "soaring above") is not thus held within bounds. It climbs over, or soars across, the boundaries that mark off the inferiors of one universal idea from those of another, and *applies to all* and is *predicable of all* and even to the marks that distinguish them one from another.

The idea *being* is a transcendental idea. Being means *thing*. And all that exists or can be thought of as existing; all that can serve to mark off or distinguish one reality from another; all that is existible, whether finite or infinite, created or increate, subsistent or non-subsistent, bodily or non-bodily, living or non-living, actual or merely possible,—all, all without exception, are some sort of *thing*. Hence all come under the application and predication of the idea *being*; all are inferiors of the idea *being*, and there are no inferiors of any other idea to which *being* does not apply or of which it is not predicable.

Even the relations and distinctions that exist among realities are inferiors of *being*, for these also are *things*.

The transcendental ideas are *being* and its (more or less perfect) synonyms: *thing, something, reality, entity, not-nothing, the one, the good, the true*. That the first five of these ideas are practically synonymous with *being* is manifest. In a later Book and Chapter we shall see that the remaining three (the *one, the good, the true*) are also synonyms of *being*, and hence are truly transcendental ideas.

SUMMARY OF THE ARTICLE

In this Article we have laid the foundation for an adequate grasp of what is to follow. We have defined *idea* or *concept*. We have noticed that ideas as such are *universal*, that is, regarded in themselves, ideas are mental grasps of essences which may be found (or are regarded as though they might be found) in a plurality of things. We have learned what is meant by the *inferiors* or *subjects* of an idea, and have seen that an idea, in itself universal, may be applied to its inferiors (or predicated of its subjects) as *universal, indefinite, particular, or singular*. We have seen that the most important classification of ideas and of their inferiors are *genera* and *species*. We have indicated the meaning of the *transcendental* idea.

ARTICLE 2. THE IDEA *BEING* AND ITS INFERIORS

- a) How Ideas Apply to Inferiors b) How *Being* Applies to its Inferiors c) Characteristics of the Idea *Being* d) Principles Involved in the Idea *Being*

a) HOW IDEAS APPLY TO INFERIORS

An idea is said to “apply” to its inferiors inasmuch as it is *predicable* of them, that is, inasmuch as it can be used as a *predicate* and affirmed of each inferior as of a *subject*. When, for example, the mind grasps the truth that an animal is a sentient thing (that is, a being equipped to gain knowledge by the use of a sense or of senses), the mind affirms within itself, makes pronouncement within itself, to this effect, “An animal is sentient.” Such a pronouncement is called a judgment; when a *judgment* is expressed in words or terms it is a *proposition*. In the example, the idea *sentient (being)* is used as a predicate; it is affirmed of *animal* as its *subject* or *inferior*. Thus we see what is meant by saying that an idea is *predicable* of its inferiors.

We have already seen that there are two chief *modes* or ways in which an idea applies to, or is predicable of, its inferiors. If the idea represents and expresses in the mind the essence of its inferiors as a complete thing, not adverting to possible essential distinctions and differences among the inferiors themselves, the idea is a *specific idea* (or *species*) and the inferiors constitute a *specific group* (or *species*). If,

however, the idea represents in the mind the essence of its inferiors in a more general and incomplete way than the specific way, the idea is a *generic idea* (or *genus*) and the inferiors constitute a *generic group* (or *genus*). Both the idea and the realities to which it applies are known by these terms,—i. e., respectively, *species* and *genus*. And the very same terms are used in yet a third way: they are used to indicate the *mode*, the *manner*, the *way*, in which the idea applies to its inferiors. Thus the idea *animal* applies to its inferiors (brutes and men) as their *genus*, and we say that in this application the idea itself is a *genus*; we also say that the sum-total of all possible brutes and men constitute a *genus*. And now we learn that the manner in which the idea *animal* applies to all brutes and men is a *generic mode* or simply a *genus*.

Genus and *species* are, therefore, *modes of predication*; they indicate the ways in which ideas are applied to, or are predicable of, their respective inferiors. There are three other ways, in addition to *genus* and *species*, in which ideas apply. The five *modes of predication* are known as "The Predicables." Of the Predicables, *genus* and *species* are the most important, but we must glance briefly at the other three:

1. When an idea expresses in the mind an essence which is the point of essential difference or distinction among the inferiors of a genus, the idea is called *the specific difference* of its inferiors. Thus the idea

rational (being), predicated of *man* to distinguish him from brutes with which he has a common *genus* (viz., *animal*) is the specific difference of its inferiors, namely, of men.

2. When an idea expresses in the mind an essence which does not constitute the inferiors of which it is predicated, but which *belongs* to these inferiors by natural necessity when their constituting essence is complete and unhampered, it is called *the property* or *the attribute* of these inferiors. Thus the idea *reasoning being* (that is, being which actually has the use of reason) is predicable of *man* as his property or attribute. For when man's essence is fully constituted, and not hampered or thwarted in any way whatever, he has, of necessity, the use of reason. Man is not constituted by the use of reason; man is man in complete essence (or species) even when he is an infant, or an imbecile, or unconscious, and cannot use reason. But when all obstacles to natural activity are removed,—obstacles such as immaturity, inexperience, bodily or mental defect, unconsciousness,—man *must* have the use of reason; this follows infallibly from his essence as man. Hence, when an idea expresses in the mind what follows by natural necessity from *the fully constituted and unhampered essence* of its inferiors, it is their *property* or *attribute*, and is so predicable of them.

3. When an idea expresses in the mind an essence

which does not necessarily belong to the inferiors of which it is predicated, but *may* belong to them, it is called *the accident* of its inferiors. Thus the idea *reading being* (that is, being that can read, or being that is actually engaged in the action of reading) is predicable of *man* (its inferior) as an *accident*. Manifestly, man may be perfectly constituted in his essence and perfectly equipped with properties and still be unable to read; certainly, he is not actually engaged in reading, even when he can read, at all times and in all places. The point, however, is that man *can* be a reading being; the thing can *happen*. The predicate *reading being* is not necessarily applicable to man; neither is it necessarily inapplicable. It means what *may*, and again *may not*, be verified in men as its inferiors. Hence, when an idea expresses in the mind no part of the essence which constitutes its inferiors in their own proper being; when it expresses no essential mark of distinction among inferiors; when it expresses no natural consequent or sequel attendant upon its inferiors in their full and unhampered essence; when it expresses merely what *may be* (or *may not be*) found in its inferiors, it is *the accident* of these inferiors.

Summing up, we say: an idea is predicable of its inferiors as their genus, their species, their specific difference, their property or attribute, or their accident. In every judgment, in every predication of the

mind, in every application of an idea to its inferiors, *one of these five modes of predication will be verified simply or by analogy*. These modes of predication ("The Predicables") are manifestly not classes of things, they are merely the five modes or ways in which it is possible that an idea should apply to its inferiors.

The Predicables may be set forth and illustrated as follows :

1. *Genus*. Represents essence of inferiors incompletely. "The triangle is a plane figure." "A plant is a bodily being." "Man is an animal."

2. *Species*. Represents essence of inferiors completely. "The triangle is a plane figure of three straight sides and three angles." "A plant is a living, non-sentient, bodily being." "Man is a rational animal."

3. *Specific Difference*. Expresses essential distinction among inferiors. Indicates points by which species that have a common genus are differentiated. "A plant is non-sentient." "Man is rational."

4. *Property or Attribute*. Represents what belongs to inferiors by natural necessity once their constituting essence is perfect and unthwarted in operation. "A plant is a seed-bearing organism." "Man is a walking and talking animal."

5. *Accident*. Represents what *can* belong to inferiors, although this is no part of their essence, nor

does it follow from the fact that their essence is constituted in integral perfection. "A plant is an ornamental thing." "Men are interested in aeronautics." "The day is rainy."

b) HOW *BEING* APPLIES TO ITS INFERIORS

To begin with, there is manifestly no possibility of applying *being* to its inferiors as *specific difference*, *property*, or *accident*. For *being* is not that which differentiates things, but that in which all things are at one. Nor is *being* something that follows by natural necessity when an essence is perfectly constituted and unhampered in function; such essence is itself a being. Nor is *being* that which may be present to, or absent from, its inferiors; it is inevitably present to them.

Further, *being* cannot be the *species* of its inferiors. For the inferiors of *being* are all things, actual and possible, and if *being* were the species of these inferiors it would express their essence completely. In other words, all things would be identical in essence, which is manifestly not the case. If *being* were a species it would be contained within the scope of a genus, and there is no simpler concept than *being* which could even be imagined as such a genus.

It is left to consider whether *being* is the genus of its inferiors. We have said that in every application of an idea to its inferiors, that is, in every predi-

cation, one of the Predicables is verified either *simply* or *by analogy*. Now, as we have just seen, *being* is not, in any sense, the species, specific difference, property, or accident of its inferiors. Is *being* then a genus? A genus simply, no. A genus by analogy, yes.

Strictly speaking, *being* is not a genus. But *by analogy*, or *analogously*, or *analogically*, *being* is a genus. This statement requires explanation, and before we can understand it we must know what *analogy* is. We pause upon this point for a few paragraphs.

Analogy is "a resemblance of relations." It is the agreement or the resemblance of things in some points, or under some aspects, or in certain relations, although the things are otherwise different. An idea is analogous (or is used by analogy) when it applies to some inferiors in one sense, and to others in another sense, and yet holds a common point of connection or relation between these varying senses. What is true of the analogous *idea* is true also of the analogous *term*. For such a term applies to the things which it denotes in a manner not evenly and equally the same in all cases, and yet not entirely and unrelatedly different in any two cases. Thus the idea (and the term) *seeing* expresses, in its simple and literal sense, the action of beholding visible objects by looking at them with bodily eyes. Yet the same idea (and term) applies by analogy to the act of intellectual understanding. One says "I see" to express the be-

holding of a visible object. One also says "I see" when some puzzling matter is explained and understood. Manifestly, seeing with bodily eyes and seeing with the mind are essentially different acts. Yet there is a kind of resemblance, relation, or *analogy* between these two acts; each is the laying hold of something by knowledge, granted the one is sentient knowledge and the other is intellectual knowledge. Thus the idea (and the term) *seeing* applies to its inferiors (bodily action of beholding, and mental action of understanding) in a sense not entirely the same in both cases, and yet not absolutely and unrelatedly different. And this is the very definition of an idea or term used *by analogy*.

In analogy of ideas or terms, it will be regularly found that the idea or term will apply in one instance in its simple and literal meaning, and in the other instances it will be used in related meanings. Now, the idea or term in its simple and literal meaning is called *the primary analogue*. The other instances, in which the idea or term applies by analogy, i. e., by related meaning ("resemblance of relations"), are *secondary analogues*. In the example already given, *seeing* in its simple and literal sense of bodily beholding is the primary analogue; *seeing* in its related sense of mentally understanding is the secondary analogue.

Sometimes the primary analogue is not expressed, but understood. Thus we may find analogy where an idea or a term is employed in a single application.

For example, one may speak of "an angry sky." The sky is called angry by reason of the relation it bears to "angry" in its simple and literal meaning, although this meaning is not expressed. The term "angry" is used only once, and yet it is apparent that it does not apply in this use in its simple and literal meaning. The primary analogue is understood, not expressed. Therefore we say that the phrase "an angry sky" is *an analogy*, or that the term "angry" is used *by analogy*, even though there is no expressed comparison or contrast of the one term in two uses.

Analogy is of two chief kinds, namely, *analogy of proportion* and *analogy of attribution*. When analogy is based upon likeness or similitude between the analogues, it is called analogy of proportion. When it is based upon some other relation than that of likeness or similitude, it is called analogy of attribution.

In analogy of proportion, the analogues bear comparison; there is a conceivable likeness between or among them; there is a proportion or sharing of the meaning of the primary to the secondary analogues; the analogues may be said to "look alike." In analogy of attribution, the analogues do not "look alike," but they are aligned in some such relation as instrumentality, causality, manifestation, etc., by reason of which the meaning of the primary analogue is *attributed* to the secondary.

In the example "an angry sky," there is analogy

of proportion, for there exists a conceivable resemblance between the lowering, frowning face of an angry man and dark and threatening clouds. Similarly, we discern analogy of proportion in the description of learning as "the light of the mind," for there is a likeness between the service rendered by natural light to bodily vision and by learning to the mind; light to the eyes and learning to the mind serve, each in its own way, to make action possible.

On the other hand, we find in the expression "a murderous weapon" an analogy of attribution. Between the quality of being murderous,—which can be predicated literally only of a vicious human being,—and the weapon that could be used for murder, there is no likeness, but a relation of instrumentality; that is, the weapon may serve as the instrument used by a murderous man, and so (by relation of instrumentality) it has *attributed* to it what is properly predicable of the evil man who might use it. Again, the expression "a healthy color" is an analogy of attribution. Health which is *manifested* by a clear complexion is here attributed to the complexion itself.

Let the student notice and identify the type of analogy to be found in each of the following phrases: "the rude, imperious surge"; "an ugly situation"; "the running sea"; "ghostly finger-tips of sleet"; "keep my memory green"; "Godless schools"; "a cruel edict"; "the head of the family."

Now, we say that *being* applies to its inferiors as a genus by analogy, or as an analogical genus. This means that *being* is predicable of all things in a manner that is not always evenly and equally the same, nor, in any two cases, unrelatedly different. All things are beings, but not all things are beings in the same measure of rank, independence, or mode. God *is* His being; a created substance *has* its being; an accidental has *in-being*, inasmuch as it has being by virtue of its inherence in something else, as heat, for example, in hot water. *Being* is predicable of God *necessarily*, for God is self-existent and cannot be non-existent. But *being* is predicable of creatures *contingently* for all creatures are contingent upon, or dependent upon, the Creator for their existence and indeed for their existibility. Thus it is manifest that, while *being* applies to all things, there is a measure of difference in the manner in which it applies to finite as contrasted with infinite, to necessary as contrasted with contingent, to substance as contrasted with accidental. In other words, *being* applies to its inferiors in a manner that is not ever and always the same in all cases, and yet is not entirely and unrelatedly different in any two cases. That is to say, *being* applies to its inferiors *by analogy*.

Granted that *being* applies to its inferiors by analogy, we may ask why we call *being* a *genus* by analogy, or an *analogical genus*. We do so, because *being*, in its application, more closely resembles a

genus than any other of the Predicables. For *being* applies to its inferiors in such a way as to express an essence that is truly in them all, yet it does not express this essence completely, with all its implications; nor does it differentiate the really different essences to which it applies. In this, *being* "acts like a genus." Still, a genus, taken strictly and simply, does not apply at all to the essential differences among its inferiors, but to the one essential point which they hold in common. But, as *being*, all points are common; *being* applies to its inferiors and to all reality about them, even to their points of essential difference, for these points are truly things or beings. *Being*, therefore, is somewhat like a genus and somewhat unlike a genus. We might call it, in the ordinary sense of the casual expression, "a sort of genus," or "a genus of sorts." In more accurate terminology, we call it a genus by analogy or an analogical genus.

There is here, indeed, a twofold analogy. The name *genus* is applied by analogy to *being* inasmuch as *being* in its function as a predicable idea is somewhat like and somewhat unlike a genus. And there is analogy in the actual application or predication of *being* to its inferiors, taken severally. In other words, there is analogy in the use of the name *genus* when applied to *being*; and there is analogy in the use of the idea and term *being* when applied to its inferiors.

It may now be asked: does *being* apply to its inferiors by analogy of proportion or by analogy of

attribution? Most authors say that *being* applies to its inferiors by *analogy of intrinsic attribution*. For, in analogy of attribution, if the basis of the analogy (the relation on which it is founded) is intrinsic to the analogues, we have *intrinsic attribution*. Thus, for example, if we speak (somewhat ungrammatically) of "healthy food," we have an analogy of attribution in which health, which is literally predicable of living bodies and notably of man, is attributed to the food which is the cause and support of health. Yet, while health is really in the healthy man (i. e., intrinsic to the healthy man), it is also *causally* intrinsic to that which produces and supports health, namely, good food. Thus, in the expression "healthy food," we have an analogy of *intrinsic* attribution. But when the basis of analogy is intrinsic to the primary analogue and extrinsic to the secondary, we have analogy of extrinsic attribution. Thus, for example, when we speak of "a healthy color," we attribute health to that which does not have health properly speaking, like a healthy man; nor does it have health causally, like good food; it does not *have* health in any sense, but merely *manifests* health, or is a *sign* of health, and is the *effect* of health. Thus we have here an analogy of extrinsic attribution. Now, while all things thinkable have *being* in a true and intrinsic sense, they do not have *being* in the same measure of equality, mode, completeness, independence. Yet in each

case their respective being is their own; it is something *intrinsic* in everything to which the idea and term *being* can apply. Hence *being* applies to its inferiors by intrinsic analogy.

But we here leave the commoner opinion, or, to be exact, the commoner terminology,—for the doctrine is not really a matter of dispute,—and declare that, while *being* applies to its inferiors by analogy, and by intrinsic analogy, it does not apply by attribution but by *proportion*. For, although there can be no question of mere physical resemblance among the inferiors of *being*, this idea connotes something truly, if incompletely, identical in all inferiors. It is not that being is *attributed* to anything; for anything existible *is* being, granted that all beings are not equally necessary, equally independent, equally actual, equally important. The being of a substance is *its* being, its own status with respect to existibility; the being of an accidental is *its* being, *its* status with respect to existibility. And so, even though a substance can exist itself, while an accidental cannot, ordinarily, exist except as the mark or characteristic of a substance, still *being* is referred to substance and to accidental in the same meaning. Therefore, although it is quite true that *being* is predicated of its inferiors by analogy, it seems illogical to say that it is merely *attributed* to some inferiors as secondary analogues. Rather it seems just to say that *being* applies to all inferiors by

an analogy of *intrinsic and proper proportion*. Between the analogues there is a real resemblance, a real and proper sharing of the meaning of *being*.

The essence *being* is found formally, or *as such*, in all inferiors of the idea *being*. It is found primarily and independently (of causes) in God alone, the First, the Uncaused, the Necessary Being; secondarily and dependently (on causes), it is found in creatures. Among creatures, *being* is found primarily in substances, and secondarily in accidentals or, as they are technically called, *accidents*. Thus, in cold water, both the substance *water* and the accident *coldness* are things or beings. But the substance has being in itself; it exists itself, whereas the accident has being and exists, not in itself, but as the modification or qualification or mark of the substance. Being is intrinsic to both the substance and the accident, but is predicated of the two things by analogy inasmuch as *their essential mode of being* is not the same; the one has being substantially, the other accidentally.

c) CHARACTERISTICS OF THE IDEA BEING

1. *The idea being is the most abstract idea.* In Logic and Psychology we learn that the idea is formed by a process called abstraction (Cf. Art. I, a, of this Chapter). By *abstraction* we rise from the sentient knowledge of individual and concrete objects to the concept or idea or *intellectual grasp of essence as such*. We "abstract the essence out" by prescind-

ing from all that limits an object to concreteness and singularity. Now, this refining-out process has reached its ultimate stage when there is only one indivisible note remaining in the mind's grasp of essence,—the note of thing, of something, of being. This idea is manifestly the most abstract of all ideas.

2. *The idea being is the most simple idea.* The term *simple* means uncompounded, non-composed, not resolvable into parts or notes. An idea is *simple* when it is not made up of other ideas. The idea *being* is absolutely simple; it consists of a single and indivisible note. The approximate synonyms of *being* (such as *reality*, *something*, etc.) are also simple, but they may be viewed as having certain implications (thus *reality* may suggest a being that is more than mental or logical; *something* may suggest a being among other beings, and so may indicate some-*other*-thing), whereas the pure concept of *being* is without such implications. Hence, we rightly declare that the idea *being* is the most simple of all ideas.

3. *The idea being is the most common idea.* That is *common* which is shared equally among a plurality. That is most common which is shared equally among all things. Now, there is nothing conceivable to which the idea *being* does not apply; it is shared unto all reality, to all thinkable things. All things, actual and possible, finite and infinite, substantial and accidental; all classifications and differentiations of things; all aspects and viewpoints and phases of things, have

this in common that they are *things* or *beings*. In this common point of *being*, all things meet. Therefore, *being* is the most common of ideas.

4. *The idea of being is perfectly transcendental.* This idea transcends all classes and distinctions of things, and applies to all. Nay, it is super-transcendental, for it applies not only to all real being (that is, to all things existible in nature) but to non-real or logical being.

5. *The idea being is the most indeterminate idea.* Determinateness or exactness in delimitation is a matter of notes, of essential or individual determinants. A picture in its first sketchy outline is not determinate; each stroke of the artist's pencil or brush is a new delimitation, and, line by line, the image is limited or made exact until it represents only one person or object or scene. The more the picture is "composed," the more details that are drawn in, the less it can represent a plurality of things, the less "common" it is, and the more "individual" it becomes. So, in a sense, is the case with ideas. The more notes in the comprehension of an idea, the fewer the objects of which it is predicable. Logicians express this truth in their axiom, "The more notes in the comprehension of an idea, the narrower is the extension of that idea; and the fewer notes in the comprehension of an idea, the wider (and the more indeterminate) is the extension of that idea." Now, the idea *being* is simple; it consists of a single note. Hence its comprehension

is all-embracing ; it is the most indeterminate of ideas.

6. *The idea being is the first idea.* It is first in the order of intellectual knowledge (called *the logical order*) for nothing can be thought of except as a thing or a being. It is first in the order of time (called *the chronological order*) for in coming to know anything we must first conceive it as a thing or being. This does not mean that infants advert reflexly to their idea of *being* as the first idea they have formed ; as a matter of fact, they do not. It means that the idea *being* is implicitly present in every idea formed by any human individual from the very first movement of intellect.

7. *The idea being is the intellectual signature of the image of God.* On this point Mr. Eric Gill has a significant word to say in his *Beauty Looks After Herself* (p. 75) : "What places him (man) as lord of creation is not his cleverness or ingenuity, not his power of ratiocination, not even his perseverance or his courage. His claim to superiority is based solely on his power of contemplation ; he alone of all terrestrial creatures is able to recognize *being*. . . ."

d) PRINCIPLES INVOLVED IN THE IDEA *BEING*

By the term *principle* we mean, in this present instance, a basic and guiding truth which becomes self-evident when we study the idea *being*. As the idea *being* is the first and the fundamental idea, so the principles, or intellectual truths, involved in this idea

are the first and the fundamental guides of the mind, and they are the solid basis of all human certitude. These principles are self-evident; they are axiomatic. Like the axioms of geometry, they are so manifest that it seems silly to stress them; yet, like the axioms of geometry, they *must* be noticed and stressed before any progress can be made in the science to which they refer. And the science to which the principles involved in the idea *being* refer is the science of philosophy, the science which embraces all human knowledge in its deepest roots. These principles are called *immediate principles* or *principles immediately evident*, since there is no need, and indeed no possibility, of a *medium* (i. e., another idea, thought, or principle) through which one might gain evidence for their truth; they are *self-evident*.

1. *The Principle of Contradiction.*—The term *contradiction* means complete and perfect opposition. Between *black* and *white* we have opposition, but it is not complete, since there are many things of which color is predicable which are neither black nor white; the two opposed ideas (and terms) do not *exhaust the possibilities*. Therefore, since contradiction is complete and perfect opposition, we know that the opposition between the ideas and terms *black* and *white* is not contradiction. It is *contrariety*; the ideas and terms are *contraries*, but not *contradictories*. The contradictory of *black* is *not-black*. Everything thinkable of which color is predicable is either *black* or it

is *not-black*. The ideas (and terms) perfectly exhaust the possibilities. We say that the ideas (and terms) *black* and *not-black* are contradictories, or that they express *a contradiction*. Since the contradictories are perfectly opposed, they block each other out; thus a thing that is entirely black cannot be also entirely white. Now, when we look at the idea *being* we are really forced to consider it against a background; we contrast it with *not-being* or nothingness. Thus we see *being* contrasted with its *contradictory*. And the mind understands at once that *being* and *not-being* block each other out, and also exhaust the possibilities. Inasmuch as the ideas *being* and *not-being* block each other out, we understand that "being is not and cannot be not-being," or that "being cannot *be* and *not-be* at the same time and in the same sense." This is the *Principle of Contradiction*. It is usually expressed in this formula: "A thing cannot be existent and non-existent at the same time and in the same way."

2. *The Principle of Excluded Middle*.—Since *being* and *not-being* are contradictories, they not only block each other out (as expressed in the Principle of Contradiction), but they exhaust the possibilities. Nothing is thinkable which is neither being nor not-being. There is, in a word, no middle ground, no no-man's-land, between these opposed ideas. That is what is meant by the phrase "excluded middle." The Principle of Excluded Middle may be expressed thus :

“A thing either *is* or it *is not*; it is either a *being* or it is *not-being*; between *being* and *not-being* there is no middle ground.”

3. *The Principle of Identity*.—Since there is no middle ground between *being* and *not-being*, it is at once apparent that what has being is itself and nothing else. A thing that has being is identical with itself; it is what it is. This self-evident truth derives, like the other principles here noticed, from the very idea of *being*.

4. *The Principle of Difference*.—This principle is the complement of the foregoing Principle of Identity. For, manifestly, if a thing is what it is, it is not what it is not; it *differs* from, or is distinct from, all things other than itself. The Principle of Identity says, “A thing is what it is.” The Principle of Difference adds, “And it is nothing else; it is distinct from all else.” Often these two principles are combined, and are called The Principle of Identity and Difference. The Principle of Difference is also called *The Principle of Distinction*.

SUMMARY OF THE ARTICLE

In this Article we have discussed the application or *predication* of ideas; and we have discerned the *modes* (called *The Predicables*) in which an idea may be predicated of its *inferiors* or *subjects*. We have listed the Predicables (*Genus, Species, Specific Dif-*

ference, Property or Attribute, and Accident) and have found that the idea *being* soars above this classification and is therefore a *transcendental* idea or concept. In application to inferiors, the idea *being* is likened to a genus, but is not simply and literally a genus; it is a genus *by analogy* or *an analogical genus*. We have made a study of *analogy*, and have found that *being* applies to inferiors *by analogy of intrinsic and proper proportion*, and not merely by *an analogy of attribution*. We have studied the most notable characteristics of the idea *being*, and have found that it is the most *abstract*, the most *common*, the most *simple*, the most *transcendental*, the most *indeterminate* of ideas; that it is the *first* idea in the order of thought (the *logical order*) and in the order of time (the *chronological order*). We have discovered and stated the self-evident *first principles* involved in the idea *being*, viz., *The Principle of Contradiction, The Principle of Excluded Middle, The Principle of Identity, The Principle of Difference or Distinction*.

CHAPTER II

PRIMARY DETERMINATIONS OF BEING

In the last Chapter we learned the meaning of the *idea* of being; here we are to study the thing itself. Being is not classified as of different *kinds*, for, as we have seen, it is transcendental and soars above such classification. Still, there are various phases of being which, for want of a better word, we may call *determinations*. This Chapter studies the following determinations of being: Being as *real* and as *rational* or *logical*; being as *actuality* and as *potentiality*; being as *essence* and as *existence*. The Chapter is divided into three Articles, as follows:

Article 1. Real Being and Logical Being

Article 2. Actuality and Potentiality

Article 3. Essence and Existence

ARTICLE I. REAL BEING AND LOGICAL BEING

a) Real Being

b) Logical Being

a) REAL BEING

Real being (called *ens reale*) takes its name from the Latin *res* (adjective form, *realis*) which means "thing" or "reality." Now, as we have seen, a *reality* is not only something that actually exists; it is anything that *can* exist in nature, independently of the created mind. We say "independently of the created

mind," because all things existible in nature depend upon the Divine Mind for their existence and even for their existibility. So a *reality* is anything that can exist without dependency upon the mind of man or of angel or of devil. For our purpose, it will be sufficient to consider *reality* or *real being* as anything that can exist, without depending for its existence upon the mind of man. For real being is capable of existence *in rerum natura*, as philosophers say; that is, it is capable of having existence "in the nature of things," and not as a form, or projection, or mode-of-grasp in the human mind.

The objects which we see and feel around us are *real* beings; so are all substances and accidents that actually exist in the universe. Even merely possible things, however fantastic,—such as a mountain of gold or a tree a mile high,—are *real* beings. For, though these things are not *actual* (i. e., are not *existent*) and probably never will be, they *could* exist; and if they did exist, their existence would be as independent of man's mind as the hills and trees that we behold around us here and now. They would exist *in rerum natura*. And everything existible *in rerum natura* is a *real* being.

b) LOGICAL BEING

Logical being (called *ens logicum* or *ens rationis*) is such being as depends for existence on the created mind, or, as we may say at once,—limiting our view

to man and this world,—logical being depends upon the mind of man. The name *logical* is derived from the Greek *logos* which, among many analogous meanings, signifies “thought” and “mind.” Thus whatever has reference to the mind or to thought-processes is called *logical*, in the fundamental sense of that term.

Logical beings depend upon the human mind for their existence. Now, which beings are, as a fact, thus dependent? They are the following:

1. Things that cannot have *real* existence, but which the mind thinks of *as though they were existent or existible realities*. For the mind, to think at all, must think of any knowable object *as a something*. Thus, for example, the mind thinks of *nothingness*, of *vacancy*, of *vacuity*, of *blindness*, of *darkness*, of *death*, as though these things had existence of their own, whereas, as a fact, they have not; for they do not consist in the presence or existence of reality, but in its absence or non-existence. Try to define any of these things, and you will find that you are forced to formulate the definition in terms of something opposite and non-existent. *Death* and *darkness* may seem to the practical mind to be definite and positive realities; but they have not a real constituting essence of their own; they consist in the absence, the *non-existence*, of life and of light. So *nothingness* is not the existence or existibility of anything; it is the absence of everything. So with *vacuum* and *vacancy*; these things are defined in terms of

their opposites, that is, they are defined as the absence or non-existence of their opposites. So with *blindness*, which is the non-existence of the power to see. The only objective existence which such things as these may have is found in the fact that *they are objectively known*. In other words, these things depend for such objectivity as they may possess upon the knowing *mind*. They are therefore rightly called *logical entities* or *logical beings* (*entia logica* or *entia rationis*).

2. Things which have neither an objective existence (or existibility) in the extramental world, nor any proper objectivity even in the mind, but which the mind, by a kind of convenient fiction, regards as knowable objects. Such a thing, for example, is "a square circle." Here the mind merely adverts to two incompatible essences that *are not* and *cannot be* compounded in one or represented in one idea, and holds them side by side, so to speak, in a close and combining view. For "a square circle" is not conceivably existent or existible, nor is it conceivable as the definite absence of an essence as in the case of *nothingness*, *blindness*, or *darkness*. It is merely the mind's view of two opposed essences seen in conjunction (but not in compound) and fictitiously regarded *as though they constituted one knowable object*. In other words, the only being possessed by such a thing as "a square circle" is the *logical* being conferred on it by the mind.

3. The relations which the mind recognizes among its ideas. These relations are not things *in rerum natura*, but things *in the mind*, and things which *depend upon the mind* for being recognized or known. However just and valid such relations may be, however true a justification or "foundation" for them may exist in nature, they cannot have existence independently of the mind. We have, for example, certain modes in which the mind understands its ideas as predicable of one another. Thus the idea *animal* is seen by the mind to be predicable of the idea *rational animal* as its genus; and, conversely, the idea *rational animal* is seen by the mind to stand related to the idea *animal* as one of its species. Now this relation is essentially a thing for the mind's grasp. It is not a thing existible apart from the mind. Therefore, it is properly said to be a *logical* being.

4. Ideas themselves (and judgments and reasonings), considered as entities or beings, and *not in their real meaning* with reference to extramental reality. Ideas do represent *reality*, but the idea *itself* is the product of the mind's activity. So with judgments and reasonings. However true, however valid, however representative of reality which does *not* depend on the mind, these mental forms and acts *do* depend on the mind which elicits or exercises them; for without a mind in which, and by function of which, these things exist, they cannot have existence at all. Therefore, they are *logical* beings, notwithstanding the

fact that their *representative value* is frequently *real*, that is, that many of them do represent what is actually existible *in rerum natura*.

SUMMARY OF THE ARTICLE

This very short article has given us knowledge of important "classes" or determinations of being. We have learned what is meant by *real* being; we have seen that this is anything existible *in rerum natura*; that is, anything that exists or can exist in nature without dependency for its existence upon the human mind. We have learned the meaning of *logical* being, that is, of being which does depend for its existence upon the human mind. We have listed four types of logical beings.

ARTICLE 2. ACTUALITY AND POTENTIALITY

a) Explanation of Terms b) Classification of Actuality and Potentiality c) Possibility d) Becoming or Change

a) EXPLANATION OF TERMS

A real being is, as we have seen, one that can exist independently of the created mind. Now, a real being that exists is *actual*; it has *actuality*; it is called *ens in actu*, that is, "a being in actuality."

A real thing that *can* exist is, in so far, *potential*; it has *potentiality*; it is called *ens in potentia*, that is, "a being in potentiality."

An existing being is *actually* what it is; *potentially*,

however, it is what it may become. A baby is actually a baby; potentially, it is an adult. Cold water is actually cold; potentially, it is hot. A seed is actually a seed; potentially, it is a plant. Hydrogen and oxygen are actually hydrogen and oxygen; potentially they are water.

Therefore, an actual creature (i. e., an existing, finite, real being) is never pure actuality. It has within it an element of the potential. It is not merely *that which is*; it bears a real relation to *that which has been*, and involves the possibility or even the forecast of *that which is to be* and *that which may be*. For this reason, every actual creature is said to be compounded or composed of actuality and potentiality. It is what it is; and that is its actuality. It may become something other than it is, in accidental or in substance; and that is its potentiality.

b) CLASSIFICATION OF ACTUALITY

AND POTENTIALITY

1. *Actuality*—(a) A creature, that is, a finite real being, is always composed of actuality and potentiality. It is therefore a *mixed* actuality. Now, a *pure* actuality, an actuality wholly unmixed with potentiality, must be an infinite being, possessing the fulness of all perfection in boundless degree, so that to *lose* anything or to *gain* anything, or to undergo any process of *change*, is entirely impossible. Pure actuality

or *actus purus* is, therefore, the very definition of God.

(*b*) A *first* actuality, or *actus primus*, does not presuppose another actuality in the order to which itself belongs. A *secondary* actuality, or *actus secundus*, does presuppose such a prior actuality. Thus, actual activity,—such, for instance, as vital activity in a man,—is an actuality; but it is not a *first* actuality, for it presupposes the actually existing human essence equipped for such activity. The man is capable of vital action in the *second* place, after his essence has been constituted in the *first* place. Now, the human essence is formally constituted by the union of the actuating and active principle called the soul, with the organic body. Thus the human essence,—with its connatural activities,—is there in the *second* place after the soul has actuated the organism in the *first* place. The soul is the *first* actuality and the operating essence is the *secondary* actuality in this particular series of actualities. This fact, by the way, explains Aristotle's definition of the soul as the "first act (or actuality) of the physical organic body." We learn, in passing, that the terms *first actuality* and *secondary actuality* are not absolute, but relative; they are applied in certain series of actualities. Manifestly, if we were to speak *absolutely*, God is the first actuality, and the only one; for all other actualities presuppose the existence of the Infinite First Cause. But we have

indicated this fact in our definition, for we said that a *first actuality* presupposes no other *in the order to which it belongs itself*.—Philosophers use these terms *first actuality* and *secondary actuality* (or *first act* and *second act*) very frequently. We say, for example, that a baby is *rational*,—i. e., has understanding and free will,—*in first act* or *in actu primo*. After a few years, when the baby has acquired sufficient experience for the powers of understanding and will to be exercised consciously and reflexly, we say that it has come to the *use* of reason, and, in its actual operations of mind and will, it is now rational *in second act* or *in actu secundo*. The basic power of reasoning and willing,—though yet inoperative,—is rationality *in first act*; the actual exercise of this power is rationality *in second act*.

(c) We make a distinction between the *actuality of essence* (called *actua essendi* or *actus essentiae*) and the *actuality of existence* (called *actus existendi* or *actus existentiae*). The actuality of essence is that actuality by which a thing is constituted as a specific kind of thing. The actuality of existence is that actuality by which a definite essence is constituted as a thing which is *here*. Limiting our view to creatures, the act of existence,—or the actuality of existence,—is that actuality whereby an essence is not merely producible, but *produced*; not only causable, but *caused*; not only existible, but *existent*.

2. *Potentiality*—(a) Every existing or actual creature is *subject* to such agencies and forces as will make it different from what it now is. In other words, the potentiality or capability of becoming something else,—whether in essence or in non-essentials,—resides in it *subjectively*. This defines what we mean by *subjective potentiality*. That water, which is now actually cold, may become hot, is a potentiality resident in the water; it is *subjective* potentiality. That water may be presently changed substantially into hydrogen and oxygen is also a potentiality resident in the water as in its *subject*; more precisely, the potentiality in question resides in the *prime matter* which is the basic material constituent of water, which has here and now *the substantial form* of water, but which may undergo,—and hence is *subject* to,—the substantial change which will drive off the substantial form of water and, in the same instantaneous process, bring in the substantial forms of hydrogen and oxygen. The student will recall here a truth mentioned in many parts of philosophy, but which has its full explanation in Cosmology, namely, that the production of bodily substances (after their first creation) is always a process of substantial change, and that the gaining of a new substantial form is the losing of the old substantial form. This truth is expressed in the familiar axiom, *generatio unius est corruptio alterius*, “the generation (substantial production) of one bodily

substance is the corruption (substantial reduction) of another." The truth also holds conversely, *corruptio unius est generatio alterius*. We repeat, *subjective potentiality* is the capability or capacity resident in an existing creature (as in its subject) of becoming something other than it now is, whether in essence or in non-essentials.—*Objective potentiality*, on the other hand, is the possibility of a thing's coming into existence. We may, somewhat illogically, define objective potentiality as the "capacity of a non-existent thing to receive existence." Let us contrast the two types of potentiality discussed in this paragraph. The acorn is potentially an oak. This is subjective potentiality; it resides in the acorn as in a subject. But we may consider the oak *itself* (i. e., objectively) without reference to the acorn or any other thing, and view it merely as a reality which is not yet existent but which *can* be existent. In this view, the potentiality of the not-yet-existent oak is *objective potentiality*. The oak does not exist, but it can exist, and in this fact,—without considering the subject in which the capability of producing the oak is situate,—we discern its objective potentiality. In a word: subjective potentiality is a capacity in an existing thing; objective potentiality is the capacity for existence in a non-existent thing. Objective potentiality is neither more nor less than *pure possibility* (called also *metaphysical, absolute, or objective possibility*) of which we shall speak in another part of the present Article.

Subjective potentiality is more than pure possibility; it is, so to speak, the surety or promise of that which, in the natural course of events, is not merely capable of existing, but which *is going to exist* or *may readily exist*.

(b) *Active* potentiality is a form of subjective potentiality, and consists in the capacity or capability of an existing thing *to act*, to *do* something. *Passive* potentiality is a form of subjective potentiality, and consists in the capacity or capability of an existing thing *to be acted upon*, to *receive* something. The power to walk or to digest food is an active potentiality or active power. The power to be shaped into this figure or that (as in a lump of wax, for example) is a passive potentiality.—In its perfect form, *active* potentiality is not properly called potentiality at all. For in this form, the *perfect* form, it is identified with the perfect essence which is God, and God is *actus purus*, or pure actuality, having no slightest admixture of potentiality in His infinite being. God's activity in creating, governing, concurring, and providing, by which His creatures have their being and their operations; His activity whereby the eternal processes of Generation and Procession take place within the Godhead, in no wise involves any *change* in God Himself. We rightly refer to God's power to do all things as His *omnipotence* or His *almightiness*; we do not rightly refer to it as a *potentiality*. For this almighty power does not *reside* in God as in its *sub-*

ject; it is not, therefore, a subjective potentiality. This almighty power is one with God, identical with the divine essence itself; it is not something that God *has*; it is one with what God *is*; and God is Pure Actuality, excluding every slightest imperfection or potentiality. It will be understood, then, that when we speak of active *potentiality*, and define it as the power to do something or to act, and ascribe this power to a being as the subject in which it resides, *we are speaking of creatures only* and of the capacities of creatures.

(c) *Active* potentiality is usually understood by philosophers as a power or capability for taking hold of something and *changing* it. The digestive power of man, for example, lays hold of food and transforms it substantially into flesh and bone and tissue. The active powers which do not involve a change in the reality upon which they work, are usually called *operative* instead of active. Thus the power of reasoning, of thinking, or even of walking, is more properly called *operative* than active. It will be noticed in a moment that the term *operative* embraces not only *active* powers or potentialities, but certain *passive* potentialities as well.—*Passive* potentiality may be purely passive, as in the case of the block of marble which receives the form given it by the sculptor. Or *passive* potentiality may be *receptive and re-active* as in the case of the sense of sight which receives the impression of a visible object and reacts to the stimu-

lus of this impression and actively sees the object. This sort of *passive* potentiality is really *passive*, for the senses do receive their objects; they do not act upon them and change them as the digestive power acts upon and (substantially) changes food, or as the sculptor acts upon and (accidentally) changes the marble block. But this potentiality is not passive in a dead and inert manner; it is *re-active*. And we call it *operative*. Thus we find that the term *operative potentiality* or *operative power* includes those *active* powers which act upon their objects without changing them, and those *passive* potentialities which *re-act* to their objects and *actively receive them*.

(d) An active or a passive potentiality is called natural when it does not exceed the powers which belong to a reality when constituted in its own essential perfection. Thus the capacity for digesting food, walking, sensing, and growing larger, are *natural potentialities* in a young boy or girl. A potentiality (active or passive) is *supernatural* when it is a capacity bestowed, in excess of the requirements or capabilities of a created essence itself, by Almighty God. The term *supernatural potentiality* is usually restricted to the capacity of God's rational creatures (men and angels) to receive,—under divine "enlargement" of their powers,—the gifts and graces whereby God is served, men's hearts are won, or the Eternal Vision is enjoyed. Thus man's capacity to receive grace is not from his own nature; his nature, as such, is incapable

of receiving grace and has no essential claim to it; by God's gift, by His "enlarging of nature" man is capable of receiving the supernatural gift of grace. So, similarly, man is capable of receiving the gift of prophecy, or the gift of tongues, or the power to work miracles, or the Light of Glory for beholding God in heaven. In the case of bodily creatures less than men, the potentiality to re-act to God's commands in a way that exceeds the normal capacities of their nature, is usually called *obediential*, to signify the fact that all creatures must *obey* their God, even in things that exceed their natural powers. Thus the potentiality of Aaron's rod to become a living serpent when thrown before the throne of Pharaoh was *obediential* potentiality, as was the potentiality of the barren fig-tree to wither instantly at the word of Our Lord.

There are certain axioms which derive immediately from the ideas of actuality and potentiality. Of these we mention but a few that are more frequently quoted in philosophical treatises and discussions:

I. "Inasmuch as a thing is actual, it is perfect; inasmuch as it is constituted in potentiality it is imperfect." *Unumquodque secundum quod est actu est perfectum, secundum quod est in potentia est imperfectum.* In other words, "actuality" and "potentiality" are synonyms respectively for "perfection" and "imperfection." For the potentiality of a thing is a capacity unrealized, unactualized, and hence it in-

volves a *lack* of perfection,—and the word *perfection* suggests a “thorough making” and a fulfillment,—which is given by actuality.

2. “Potentiality cannot actualize itself ; it is actualized by something actual.” *Potentia ut sic per se ad actum reduci nequit; reducitur ab alio principio in actu.* That which is constituted in the state of potentiality, and is in so far imperfect, cannot give to itself what it does not possess, that is, actuality. Actuality must be conferred by a capable agency existing and functioning to actualize the potentiality in question.

3. “Absolutely speaking, actuality is prior to potentiality; but in a creature potentiality is prior to actuality.” *Absolute prior est actus potentia; in ente autem mutabili prior est potentia actu.* To illustrate: a cause must exist before it can produce its effect; it must be actual before it can actualize the objective potentiality of the effect. But no created cause exists which is not itself an effect, and hence, though now existing and actual, it came to actuality by the actualization of its own objective potentiality. Thus, the chain of creatures runs necessarily back to the absolute First Cause, the *actus purus*, and in this, absolutely speaking, we find the basic actuality, prior to all potentiality. But a creature must have potentiality before it can act or receive action, and here we find potentiality prior to actuality.

4. “Whatever is moved, is moved by something other than itself.” *Quidquid movetur, ab alio move-*

tur. Whatever is moved is, in so far, actualized; it is carried from a state of potentiality to actuality. And we have seen that potentiality cannot actualize itself. *Movement* does not mean local motion only; it means this, of course, but it means *any* transit from potentiality to actuality.

c) POSSIBILITY

Possibility is a word derived from the Latin *possibilitas*, which in turn is from the verb *posse* "to be able." *Possibility*, therefore, by reason of its etymology, is that whereby a thing "is able" to exist. The clearest definition of *possibility* views the term negatively, and declares that possibility is the absence or non-existence of self-contradiction in the very concept or thought of a thing. If you analyze the concept or thought of a thing, and find that its elements are not in conflict,—if these elements do not contradict one another and refuse to be compounded,—then the thing is intrinsically possible. Thus the mountain of smooth glass which the hero in the fairy-tale had to climb in order to liberate the enchanted princess, is intrinsically possible. No such mountain exists on earth, and it is not likely that it ever will exist; but the point is that *could* exist; there is no conflict or contradiction in the the very thought of its existing. But a "square circle" is a conflict in itself; the elements of "square circle" are found to be contradictory, mutually cancelling

each other, and hence the "square circle" cannot be thought of as an existing thing. Therefore, it is not intrinsically possible; on the contrary, it is *intrinsically impossible*. Intrinsic possibility and intrinsic impossibility are sometimes designated by the adjectives *absolute*, *metaphysical*, *objective*, as well as by the adjective *intrinsic*.

Anything intrinsically possible can, of course, be brought into existence by the boundless power of God. Things intrinsically impossible cannot be brought into existence at all. And this is not saying, as many thoughtless persons seem to think, that the infinite power of God is not really infinite after all, and that there are some things that God's power cannot compass. For intrinsically impossible things are not true *things* or *realities* at all; they are logical beings or logical entities (*entia logica* or *entia rationis*). We call them "things" by a sort of extension or figure of speech, for we have no adequate simple term for them. An intrinsically impossible thing,—such, for instance, as a "square circle,"—inevitably cancels itself and turns to nothing when we try to conceive it in terms of reality. Thus, "a square circle" is neither more nor less than *a circle which is not a circle*. In other words it is nothing at all. If you were to draw the picture of circle on a blackboard, and then carefully erase the drawing, you would not pose an unanswerable question by pointing to the vacancy and

saying, "Can God make that?" For the obvious answer is, "Can God make *what?* There is nothing there."

Anything, then, that is *conceivable* as a reality, anything that is *thinkable* as existing, whether as a fact it exists or not, is intrinsically possible; in other words, it has objective potentiality. Now, an intrinsically possible thing is said to be also *extrinsically possible* when there is a cause capable of conferring actual existence upon it. Therefore, every intrinsically possible thing is also extrinsically possible inasmuch as there exists an Almighty First Cause which can effect or produce it. But if we limit our view to the power of creatures,—to their active and operative potentialities,—we find that creatures (which are *secondary causes*) are not able to effect or produce every intrinsically possible thing. For many things which involve no self-contradiction are yet beyond the power of created causes (i. e., *secondary causes*) to produce. We say of such things that, while they are intrinsically possible, and also extrinsically possible to the *primary* cause (God), they are *extrinsically impossible* to the limited power of natural or secondary causes. Thus the glass mountain of the fairy-tale is a thinkable thing; it is intrinsically possible; it is also extrinsically possible to God; but it could not be produced by the natures or *physes* that we have available in this world, and so we say that it is *physically impossible*. To vary the language a bit, it is *metaphysi-*

cally possible (i. e., intrinsically), but *physically impossible*; it is *absolutely possible*, but *relatively* (i. e., in *relation* to the power of created natures) impossible; it is *objectively possible* (i. e., as an existible *object* or reality), but *subjectively* (i. e., with reference to the subjective potentiality of creatures) impossible. Whatever is within the scope of natural powers (secondary causes) to effect is *physically possible*; whatever lies beyond this scope is *physically impossible*. It is physically possible for a man to master the works of St. Thomas Aquinas in many years; it is physically impossible for a man to master these works in a day. It is physically possible for a strong man to climb the Matterhorn; it is physically impossible for a baby to perform the same feat. It is physically possible for a sick man to show sudden and unexpected strength; it is physically impossible for a dead man to come back to earthly life. Whenever the power of God intervenes to produce an effect that is physically (but not metaphysically or intrinsically) impossible, we have a *miracle*. A miracle may be defined as a wondrous event, outside the ordinary course of nature, produced by Almighty God directly or through the instrumentality of creatures.

We have said that intrinsic possibility is *absolute* possibility. The term *absolute* is from the Latin *absolutus* which means "loosed from; freed from." A thing absolutely possible is freed or loosed from any restricting considerations, such as "possible to un-

aided nature," or "possible in a certain way or under certain conditions." Absolute or intrinsic possibility is the possibility of a thing considered *in itself* and not in special relations. Now, there is another view of possibility (extrinsic possibility, of course) which does see it in special relations, that is, in relation to the capacity of certain causes. This sort of possibility is not absolute, but *relative*. Physical possibility is one form of relative possibility; it is possibility in relation to, or *relative* to, the natures or *physes* of creatures. There is yet another form of relative possibility which views possibility in relation to, or *relatively* to, the effort or care which is expended in normal human conduct. This type of relative possibility is called *moral possibility*. The term *moral* does not suggest, in this present use, the issues of good and bad, right and wrong. The word is derived from the Latin *mos* (stem, *mor-*) which means characteristic human action or conduct. Thus the term *moral* here suggests merely what lies within the scope of normal human action. A thing is *morally possible* when,—being first intrinsically possible and also physically so,—it falls within the power of man when acting in a normal and characteristic way. Therefore, a thing which is physically possible is also morally so when a man can effect it without going beyond the normal human mode of action; in other words, a thing is morally possible when it can be effected by man *without very great difficulty* or the expenditure of *very great exertion*.

Thus it is physically possible for a man to walk three miles to Mass on Sunday, and also morally so. It is physically possible for a strong man to walk ten miles to Mass, but it is morally impossible. It is physically possible for an unskilled climber to scale a difficult mountain-peak, but it is morally impossible. It is physically possible for a speaker to enunciate every word of a lengthy oration with perfect intonation, stress, and correctness of emphasis, but it is morally impossible. It is physically possible for a motorist to observe every least traffic regulation for a full year together, but it is morally impossible. It is physically possible for a man to make a long and expensive journey for the purpose of gaining some unimportant bits of information, but it is morally impossible. In a word, that is morally impossible which is done with very great difficulty, or which involves outlay of effort or expense greater than ordinary human prudence would deem justified in the circumstances.

It is manifest that before a thing can be relatively possible, it must first be absolutely possible. Further, it is clear that before a thing can be morally possible, it must first be physically possible. Thus all possibility rests upon the ultimate basis of absolute or intrinsic possibility. We have now to inquire into the root-principle of intrinsic possibility itself.

All philosophers agree that intrinsic possibility means the absence of conflict or contradiction in the

very concept or idea of a thing. But we have a question to answer which goes beyond this point of common agreement, and asks how it comes about that our ideas or concepts of intrinsically possible things are, as a fact, without conflict, while our ideas of intrinsically impossible things are self-contradictory. In other words, what, we ask, is the root-principle of intrinsic possibility?

1. Some theorists have held that the basic principle of intrinsic possibility is the actual existence of things. That things exist, they say, is proof positive that they *can* exist. Now, it is self-evidently true that actual existence is a proof of possible existence; the fact that a thing *is* is indubitable evidence that it *can be*. This is expressed in the ancient axiom, *ab esse ad posse valet consecutio*. But this truth does not constitute an answer to the question here proposed. We wish to know the ultimate principle of intrinsic possibility; we wish to know how it happens that intrinsically possible things are, as a fact, possible. We are not answered by the assertion that some possible things *do* exist and therefore *can* exist. The existence of a thing is *proof* of its possibility, but it is not an ultimate *explanation* of its possibility. We therefore reject the theory of actual existence as the root-principle of intrinsic possibility. We find that this theory misses the issue entirely; it does not explain what it purports to explain.

2. Other philosophers have taught that the ideas or

concepts of things in the human mind constitute the ultimate principle of intrinsic possibility. The fact, they say, that we can think of a thing as existing is the principle of its existibility, that is, of its intrinsic possibility. But this theory would make the human mind the creator of its objects, which is not the case. Things in nature exist independently of the human mind; hence they have their existibility (or possibility) independently of that mind. We therefore reject the theory here proposed.

3. William of Ockham (1290–1347) declared that intrinsic possibility finds its ultimate principle or root in the power of God. But this doctrine would limit the divine and infinite power. Things intrinsically impossible would then be so only because God would lack power to effect them, which, as we have seen, cannot be the case. God's power is indeed the ultimate principle of the extrinsic possibility of existible things, but not of their intrinsic possibility.

4. René Descartes (1596–1650) taught that intrinsic possibility depends ultimately upon God's free will; things are possible because God chooses that they shall be so. But this doctrine would destroy the objective value of knowledge and render all human science impossible. For if it cannot be known that essences are constant, that they are necessarily and changelessly the same, our knowledge of essences (i. e., our ideas) must be transitory, unreliable, subject to change without notice. If, for example, the

essence *man* or the essence *circle* (that is, the metaphysical essence, the things which these essences *mean*) could be changed by divine choice to an impossibility, our knowledge of what *man* means, or what *circle* means, would be no true knowledge at all. And, unless God in the supposed choice were to annihilate existing men, we should be faced with the absurdity of beholding utterly impossible human beings walking about; we should find the non-existent existing, and the impossible an actual fact. Were the free choice of the divine will to render actual essences impossible, we should find all our present knowledge of these things falsified, our sciences involving them futile and erroneous. Psychology, physiology, anatomy, hygiene, and all sciences which in any way touch the human essence would be rendered meaningless in the event that God should freely choose to make the essence *man* impossible. And should the divine choice make the essence *circle* impossible, geometry would go by the board. We are forced to reject the theory that the root-principle of intrinsic possibility is the free choice of God. God's choice does determine which creatures shall exist, not which shall be possible.

5. To find the true principle of intrinsic possibility we must look to the divine mind, the divine intellect, the divine knowledge. We have learned that intrinsic possibility consists in the "thinkableness" of things. To borrow an analogy from secondary causes, we

know that the architect must first think of the building in project; he must know it as existible; he must conceive it as a reality; else he cannot even begin to draw his plans. The sculptor must first know the image he is to produce, or he cannot even begin to produce it. The dressmaker must first know the garment she is about to make, or she cannot even begin to make it. In other words, before a thing is possible to one who can produce it, it must be thought of and known; it must exist in knowledge before it can exist in fact. Therefore, before anything is intrinsically possible, it must be known as existible in the mind of the First Infinite Cause. For this reason we say that the true principle of intrinsic possibility is the divine intellect. Now since God's knowledge is one with His intellect, and His intellect is one with the divine essence itself, we say that the essence of God is the *radical* principle of intrinsic possibility, though the divine intellect is the *formal* principle of this possibility.—We must pause upon this doctrine for a brief space. God knows all things possible; He knows all things existible; He knows these things in His own divine essence, since His essence is one with His knowledge and His knowledge one with His essence. God knows all things possible and knows His power of choosing which of them He shall bring to actual existence. As the creating cause, the First Cause, God thus knows all things perfectly before they exist in fact, before any of them exist, before any scrap or

shred of them or any "materials" for their making exist in fact. Now with creatures (secondary causes, since God is the sole primary cause or First Cause) the case is much different; indeed, the case is opposite. God, in His own essence, knows all possible things before any of them exist. Creatural causes, if they be rational (that is, if they be men or angels) must also know what is possible to their action before this exists; but creatures do not know what is possible to them in their own essence, nor eternally; creatures have *learned* what is producible from other things which actually exist. God does not learn; He knows perfectly, eternally, in His own essence. Rational creatures learn, they acquire knowledge, and it is always in the light of this acquired knowledge that they project future possibilities and plan things not yet existent. Hence, while the knowledge of a creature may reach forward into the realms of possibility, it also reaches backward and finds its support and foundation in the realm of things which actually exist. Even in projecting something new,—as the architect may envision new types of building, the sculptor new styles of artistic expression, the dressmaker new fashions,—the knowledge of a creature ever views the new in terms of the old; the new thing in project is a reshaping, recombining, rearranging of elements known from actual experience. Creatural activity can never bestow *complete* existence by a creative act, for creation is possible to God alone. The milliner may

call her newest hat "a creation," but it is really a re-arrangement of things already created. Creatures can know things only from other things which exist; the elements which enter into the projected production must exist before they are known, for they must be *learned*. But with the First Cause all existibles, all things possible, must be perfectly known,—and not merely in their elements,—before they exist. Thus we see that all things possible depend essentially upon the divine intellect which perfectly knows them as possible, and fundamentally they depend upon the divine essence itself.

d) BECOMING OR CHANGE

We have learned that a finite thing *is* what it is, and is in so far *actual*; but it *came* into being, and it involves the possibility of *becoming* something other than it is, in substance or in accidentals; indeed it is in constant process of becoming something else; and in so far it is *potential*. Thus the study of actuality and potentiality necessarily involves the topic of *becoming* or *change*.

A finite actuality is, as we have seen, never *pure* actuality; it is mixed with potentiality; it is a *mixed actuality* or *actus mixtus*, as philosophers say. Indeed, it is just to declare that it is *composed* of actuality and potentiality. Therefore, a finite actuality is not merely actual *being*; it is also actual and potential *becoming*.

So manifest is the fact of *becoming* or of *change* in the world about us, that certain philosophers, imitating the ancient Heraclitus and Protagoras (6 and 5 centuries B. C.), have declared that the very essence of things is change: "Nothing *is*, they say, all is *becoming*." But this doctrine is not only destructive of objective truth; it is self-contradictory. If all consists in change, it is pertinent to ask *what it is* that continually changes. Baffled by this question, certain other philosophers veered completely about and denied the existence of becoming or change, saying that this is mere illusion: "All *is*," they declare, "nothing *becomes*." Such was the doctrine of Parmenides (6 century B. C.) and many a muddled philosopher followed him in teaching it. But the doctrine is wholly inadmissible. It makes nonsense of human knowledge, and it suggests that everything is a part and parcel of Pure Actuality (that is, of God) and thus breeds pantheism, the most absurd of all false philosophies. The truth of course is that the world of finite actualities is also a world of potentialities; actual *being* exists and so does actual and potential *becoming*.

Now, becoming is a process of *change*. And change may be defined as a movement or transit from one state of being to another; it is a transition from potentiality to actuality.

There are four types of change, three of which are accidental and one substantial. These types are: *change of place* or *local change*; *change in amount* or

quantity or *quantitative change*; *change in quality* or *qualitative change*; *change in substance* or *substantial change*. The movement of a body from one place to another, or the movement of a part of a body with respect to other parts, is *local* change. The movement or transition of a body from smaller to larger, from larger to smaller, or the increasing or diminishing of the number or amount of elements or parts, is *quantitative* change. The change or movement from one quality to another, from hot to cold, from sweet to sour, from light-colored to dark-colored, from ignorance to knowledge, from virtue to vice, from joy to greater joy, is *qualitative* change. It will be noticed that qualitative change is not limited (as local change and quantitative change) to bodily things, but extends to the mental, the volitional, the spiritual. These three types of change are *accidental* since they affect a substance without affecting its nature or essence in a radical way; they *modify*, they *qualify*, they *characterize* a substance without transforming it into another substance.

The fourth type of change is *substantial change*. It consists in the transition of a bodily thing (since spirits cannot be substantially changed) from one substantial state to another. The change of a living body to a dead body; the change of lifeless food into living blood and tissue and bone and sinew; the change of oxygen and hydrogen into water and of water into these two elements; the change of coal

into ashes and smoke—all these are examples of substantial change.

Now, every change involves five things: (1) *A thing to be changed* whether substantially or accidentally. This is called the *term from which* (or the *terminus a quo*) the change moves or takes its beginning. (2) *A thing resulting from the change*, and this is the *term to which* (or the *terminus ad quem*) the change moves and in which it finds its completion or fulfillment. (3) *An actual transition or movement* (called the *transitus*) in which the change essentially or formally consists. (4) *A substantial support* for the change, and this remains unchanged in the process. (5) *An agent or mover or motor-force* which effects the transition. The first three requirements of change are self-evidently necessary to it, and we need not pause to comment upon them. But a word must be said about the other two.

We assert that every change requires *a substantial support*, a *subject* which remains itself unchanged. In accidental change, this support or subject is the substance affected by the change. When water is changed from cold to hot, the water itself is the subject and the support of the change-process. When a quart of water is increased to a gallon by the simple process of pouring more water into the container, the water itself is the subject which undergoes the change in quantity. When a soul is changed from the state of

sin to the state of grace, the spiritual substance of the soul underlies the change. Notice that in all these changes, the substance which undergoes or underlies the change is itself unchanged. Water remains water while it passes from cold to hot, from a quart to a gallon; the soul remains the same soul, the same substance, while it passes from sin to grace. There is no difficulty in understanding the necessity of a substantial support (itself unchanged) for *accidental* change. But we must notice the fact that there is an equal necessity for a substantial support (itself unchanged) for substantial change.

If you change coal, for example, into ashes and smoke, you do not annihilate the coal and create the ashes and smoke. There is not, in this process of change, a *complete* breaking off of one actuality and a *complete* producing of other actualities. No, there must be something which underlies and supports the change, something which remains itself unchanged; and this something must be substantial, as is manifest from the nature of the case. We call this substantial something by the name *prime matter* or *materia prima*.

Prime matter is the underlying substantial substrate of *all* bodies. It is not a definite *kind* of matter; it has no *kinds* of its own, no *actuality* of its own, no *existence* of its own or by itself; it is *pure potentiality*. Every body is *bodily*, and its bodiliness is due to its

prime matter. Every existing body is an *actual* body of a definite *essential kind* (lifeless, living, mineral, vegetal, animal, human), and all its actualness, and all its definiteness of specific kind, are due to the fact that prime matter is *actualized* in this essential and definite kind of being by another substantial reality called *substantial form*. Prime matter and substantial form are the ultimate substantial elements of any existing body. These are two substantial co-principles. Prime matter cannot exist by itself; and, unless it be spiritual (as in the case of the human soul, for example) substantial form cannot exist by itself. But the two come together to produce one complete and specific kind of actual bodily substance. Prime matter and substantial form are substantial; they are substances; but they are *incomplete* substances. They are complementary, one to the other, and from their union results, in each individual body, the actuality which we recognize as *this existing, substantial bodily reality*.

Every existing body is, therefore, a compound of prime matter and substantial form. And when substantial change occurs,—as, for example, in the change from coal to ashes and smoke,—this is due to the fact that one substantial form gives way to another or to others, the prime matter remaining the same as the support or subject of the substantial change. It is not within our present province to discuss the ultimate constitution of bodies; this study

belongs to the department of philosophy known as Cosmology. But we must notice the fact that bodies are composed of prime matter and substantial form, in order to grasp the full meaning of substantial change. And out of this fact, which we have very briefly explained, emerge two inevitable conclusions, namely, (1) The coming in of one substantial form is the driving out of another substantial form. There is no interval during which *no* substantial form holds prime matter in being; for prime matter is incapable of existence by itself. There is an ancient axiom which expresses this truth: *generatio unius est corruptio alterius*, "the generation (i. e., the substantial production) of one thing is the corruption (i. e., the substantial reduction or removal) of another." The axiom holds also in the converse: *corruptio unius est generatio alterius*. The generation of water is the corruption of hydrogen and oxygen; the generation of hydrogen and oxygen is the corruption of water. (2) Substantial change (i. e., generation and corruption) is *instantaneous* change; it is not progressive, successive, or gradual. When, for example, each tiny particle of coal is changed to ashes and smoke, a line is crossed, an immeasurable instant is passed, and the change has taken place. Up to that line, that instant, the substance was coal; beyond it, the substance is ashes and smoke. The instant itself is immeasurable. Similarly, in the substantial change called death, there is an immeasurable instant before which the living

body is alive, after which it is dead, and the line itself is not to be reckoned in terms of duration; it is a measureless instant.

In passing, it is well to notice that *creation* is not substantial change, but complete and entire production. To create is to produce a thing in its entirety, there being no materials of any sort out of which the created thing is made. Therefore, the created object, the creature directly made by the creative act, is not *changed* from one substantial state to another. The "term from which" is lacking; there is no original substantial state from which the creature is drawn by the creative act. In like manner, *annihilation* is not a substantial change. *Annihilation* means the complete reduction of a reality to nothingness. Hence there is no substantial state to which change is made (i. e., no "term to which"), and the annihilated creature is not changed but totally destroyed. Creation is an operation requiring infinite power, and therefore is possible to God alone. Annihilation is the withdrawal of the creating and conserving power, and hence can be exercised only by the infinite being which has that power to withdraw. Creation accounts for the first production of bodily substances; thereafter, their origin is found in substantial change, i. e., in generation. Annihilation is within the absolute power of God, but does not occur, because it is not in harmony with the ordained power of God, that is, with God's

power as seen in its infinite identity with His other perfections, such as His goodness, mercy, wisdom, justice.

We must now consider the final requirement of change, viz., the need of an agent, a motor-force, *a mover*, under the action of which the change is brought about. Change is movement, and nothing moves itself; a mover other than the thing moved is required. We have already seen the truth of this in our study of the principle *Quidquid movetur ab alio movetur*, "Whatever is moved is moved by something other than itself." And in all activity of finite things, the verb *to move* is properly employed in the passive voice. We say, in casual speech, that an engine moves, or a stream moves, or a man moves, but, in each instance, the exact expression is "is moved" rather than "moves." Self-movement, strictly understood, is a contradiction in terms and in thought. It involves the notion of a motionless thing giving itself motion, that is, giving to itself what it does not possess to give. Finite realities have activities, but these come from their capacities, and the capacities come in last analysis from the Creator. No creature moves itself from nothingness into existence. And, given existence, it operates by powers which belong to a nature which the creature did not give to itself, did not construct, and does not maintain in existence. A creature, that

is, a limited agent or actor, is moved into existence, preserved in existence, dowered with powers for acting in a certain way; and all this happens by the action of existing causes (other than the creature affected by them), and ultimately by the infinite creator, the *Actus Purus*, the First Mover Himself Unmoved.

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of *actuality* and *potentiality*, and have defined the varieties, *pure* actuality, *mixed* actuality; *first* actuality, *secondary* actuality; actuality of *essence*, actuality of *existence*; *subjective* potentiality, *objective* potentiality; *active* and *passive* potentiality; *natural*, *supernatural*, and *obediential* potentiality. We have set down certain axioms which derive immediately from the ideas of actuality and potentiality. We have studied the question of *possibility*, and have found that possibility is *absolute* and *relative*; and that relative possibility is either *physical* or *moral*. We have discussed various opinions about the root-principle of absolute or intrinsic possibility, and have concluded that this principle is, formally, the divine intellect, and, fundamentally, the divine essence. We have investigated the topic of *becoming* or change, defining it, indicating its types, and explaining its requirements.

ARTICLE 3. ESSENCE AND EXISTENCE

- a) Essence b) Existence c) Distinction Between
Essence and Existence

a) ESSENCE

The *essence* of a thing is that which makes the thing what it is, constitutes it in basic reality, establishes it as a definitely specific kind of thing. If a reality is composed of distinct constituent parts, the enumeration of these parts defines the *physical essence* of the reality. Thus, "body and rational soul" defines the physical essence of man. If we consider an essence in the fundamental realities which explain it to the understanding mind, the enumeration of these realities or real aspects of the essence defines the *metaphysical essence*. Thus, "animality and rationality" defines the metaphysical essence of man, and we say man is "a rational animal." In the metaphysical definition (which expresses the metaphysical essence) of *man*, we view the essence as the sum-total of "notes" or component ideas which enter into the concept or complete idea *man*; we do not view the essence as the sum of physical parts which constitute any individual man *in rerum natura*. Man's body and soul are his constituent *physical* parts; these are parts which make up any individual man *in rerum natura*; the parts are distinct and even separable, and indeed they are separated when a man dies. But the "notes"

of the idea man (i. e., being, subsistent, bodily, living, sentient, rational,—the first five of which are summed up as *animal*) are not physical parts; they are *meta-physical* parts, or, as they are generally called, *meta-physical grades*. They are distinct *notes* but they are in no wise *separable parts*. They express *realities* in man, and are no mere mental figments or groundless views of diverse aspects of man; but they are not separable realities in the human essence. These notes baffle mere *physical* division, partition, or separation; as parts of the essence man they are *metaphysical*. They express the essence *man* in a more completely *abstract* way than does the physical definition of this essence.

We have seen in another place that essences are marked by necessity and changelessness. If, for example, the essence *man* is truly expressed in the physical definition, "Man is a creature composed of body and soul," or, metaphysically, in the definition, "Man is a rational animal," it is manifest that, to be man, a being *must* consist of these elements. This explains what is meant by saying that essences are *necessary*. And what is necessarily so is *changelessly* so, *eternally* so, *indivisibly* so. For a man to be a man, he *must* have the essence *man*, invariably, always, completely. For a circle to be a circle, it *must* have the essence *circle*, changelessly, eternally, entirely. Otherwise these beings are *not* man and circle at all. Hence we justly declare that the characteristics of essences, considered

in the abstract, are these four: necessity, changelessness, eternity, indivisibility. And when we come to *know* an essence, when we grasp it in concept or idea, we have laid hold of something necessary, changeless, eternal, indivisible. When, for example, I know what *circle* means, I can define its essence, and my definition expresses what it must be to be *circle* at all; the definition expresses not only what a circle now is or happens to be, but what a circle *is, has ever been, must ever changelessly remain, without division or break in its essential unity.*

There have been philosophers who taught that essences are not knowable, that our knowledge of things cannot go beyond some grasp of externals, that our ideas are only mental names applied to things or mental forms turned out by the mind without reference to fundamental reality. So the Nominalists and the Conceptualists have taught. We cannot accept Nominalism or Conceptualism. For, omitting the argument,—which might well be forcibly elaborated,—that the Nominalists and Conceptualists assume *an essential knowledge* of the mind in their attempt to prove that it cannot have essential knowledge of anything, we present positive evidence for the fact that we can and do know the real essences of many things. Not of all, indeed, but of many. Life inevitably makes us aware of the real relation of cause and effect; we cannot help noticing how certain properties and activities stand related to realities as effects to their causes.

Now, when we know proper effects, we know something *essential* about the causes whence these effects proceed. When, for example, we notice that a plant grows, that an animal is sentient, that a man can reason and exercise acts of choice, we know something about the real essence of plant, of animal, and of man. The growth of a plant,—a constant and proper phenomenon,—tells us something about the real essence of the plant: *it is a thing which grows*. Similarly, the proper activities of animal and of man tell us much about the real essences which exercise these activities. Properties are so many indicators or indexes of essences. As a thing *is*, it must *act*, for its proper activity is rooted in its being. When we know all there is to know about the proper activity of a reality, we know all there is to know about the essence of that reality. All men *define* realities and recognize *essential* distinctions among them. Now, a definition is the expression of the real essence of a reality, and essential distinctions involve knowledge of the essences distinguished. Our ideas truly represent essences, and the Nominalist and Conceptualist theories fall before the unanswerable actuality of experience and the nature of human reasoning. A full discussion of the trans-subjective value of our ideas is found in that part of philosophy which is called Criteriology.

b) EXISTENCE

Existence is that which actualizes an essence and

sets it outside its causes as a thing produced. Of course, we speak here of the existence of finite or creatural things. The infinite essence of God involves, and is identified with, all perfections in boundless degree. Hence the essence of God involves the perfection of infinite existence. God is self-existent; He is essentially existent; He is *ipsum esse subsistens*, "subsistent (hence, existent) Being itself." But creatures are *caused* beings; they are *produced*; their existence is *bestowed* on them and *received* by them; they are not identical with their existence. It is very easy to see that there is a clear mental or logical distinction between *that which* exists (essence) and *that whereby* it exists (existence). We must now take up the question of this distinction to discover whether it is more than a logical one, to find whether it is, in fact, a *real* distinction.

c) DISTINCTION BETWEEN
ESSENCE AND EXISTENCE

For centuries there has been a notable controversy among scholastic philosophers about the nature of the distinction between the essence and the existence of a finite reality. The question is not concerned with metaphysical essences. All, of course, recognize the fact that if a man, for instance, is to exist at all he must exist as a rational animal; this metaphysical essence ("animality plus rationality") is manifestly not really identified with actual existence; it is a re-

quirement for the existence of such an essence, but it is an *abstract* essence, viewed in itself or *as such* by the mind. The question is concerned with the actual physical essence and the actual existence of an existing creature. It inquires, for example, whether there is a *real* distinction or only a *logical* distinction between the actual, existing physical essence (body-and-soul composite) of John Jones who stands here before us, and the actual existence of John Jones. Are the actual essence and the actual existence of this man two distinct realities, or are they only two aspects of the one reality?

Some philosophers say that the distinction in question is *logical* and not *real*. They say that the essence and the existence of an actual creature are only two aspects of one thing. They willingly admit that there is ground and basis for this mental or logical distinction, inasmuch as an essence can be thought of without its existing, and the aspects of essence and existence in an actual creature are real enough as aspects or views. And therefore these philosophers declare that, while there is only a logical or mental distinction between the essence and the existence of an actual creature, this distinction is grounded in reality. To put the doctrine in technical terms, they say that the distinction is *a distinction of reason with a basis in reality*, or, in the well known Latin phrase, *distinctio rationis cum fundamento in re*. This distinction is

sometimes referred to as a *virtual* distinction. (Cf. *Book Second, Chap. I, Art. 1, d.*)

Opposed to the doctrine of *mental distinction* only stand the majority of scholastic philosophers, declaring that the distinction in question is a *real* one. Now, a real distinction is a distinction *as between thing and thing*; it is not merely a distinction between different aspects of one thing. It is not here asserted that the essence and the existence of a creature are *separate* or *separable* things; it is not suggested that an essence can be actual without existing, or that the existence of a creature can have its being apart from the creature which exists. For it is manifest that existence is the actualization and the actuality of an essence; it sets the essence among actual things. What the present doctrine maintains is that, in a creature, essence and existence are *two realities* which constitute the creature in its being; that essence and existence are *two real principles* which, independently of the created mind, combine, as really distinct things, to make the creature *an existing essence*.

We might spend much time upon this question, weighing argument against argument, and setting points against rebuttals, but it will suffice to say that the weight of authority and of cogent reasoning appears to be on the side of those who assert the *real* distinction. By way of support for this statement we may set down a few brief notes.

1. There is a real distinction between two things when one of them is not included or comprised in the complete concept of the other. Now, the concept of the essence of a creature can be quite complete without involving the notion of that creature's actual existence.

2. Creatures are contingent; they have no intrinsic necessity for existence; they are brought into existence; existence is conferred on them by the action of their producing causes. Now, if existence be identified with essence in a creature, then there is a *necessary* connection between these two principles. But this is contrary to our whole idea of contingency in creatures.

3. Substantial creatures are a) *matter*, b) *form*, or c) a *composite* of matter and form. *Prime matter* is pure potentiality; it is indeed an essence, though incomplete, but it cannot have existence by itself. A material *substantial form* is likewise an essence, though incomplete; but it cannot have existence by itself. A non-material substantial form (the human soul) can exist completely, yet it is incomplete specifically or essentially. The *composite* of matter and form (that is, a complete actual bodily essence) cannot be identified with its own existence, since it is a compound of parts which are not, respectively, identified with their own existence.

4. There is a real distinction between what a thing is in its basic constitution and that which it partici-

pates or shares. Now, existence is rightly said to be shared to creatures; creatures have existence, not as their basic constitution in whole or in part, but as something which they participate, something shared unto them.

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of *essence* and *existence*. We have distinguished *physical essence* and *metaphysical essence*. We have shown that the characteristics of essence, considered in the abstract, are *necessity, changelessness, eternity, indivisibility*. We have shown that knowledge of real essences is possible to man, and that the doctrines which deny this truth, notably Nominalism and Conceptualism, are inadmissible. We have briefly set forth the terms of the ancient controversy about the nature of the distinction between the essence and the existence of an existing creature, and we have favored the doctrine which asserts *a real distinction*, and not merely *a logical distinction*, between creatural essence and existence.

BOOK SECOND

PROPERTIES OF BEING

This Book discusses those aspects of being which are called its transcendental properties or attributes, and studies all their implications. Further, the Book investigates the characteristics or properties of being, which, while not strictly transcendental, are nevertheless most general or universal. These matters are studied in two Chapters, as follows:

Chapter I. The Transcendental Properties of Being

Chapter II. The Most General Properties of Being

CHAPTER I

THE TRANSCENDENTAL PROPERTIES OF BEING

This Chapter studies three aspects or phases of being. These are not something different from being itself; they are not something new or additional which we must join to the concept of being. On the contrary, they are entirely coextensive with being and identical with it. But these aspects or phases of being are of great help to our inquiring minds when we come to study all the implications of the concept of being: they serve us as distinct points of approach to that study. For want of a better term we call these phases or aspects of being by the name *properties* or *attributes*, and, since they are identified with being itself, which is a transcendental concept, we call these properties *transcendental properties* or *transcendental attributes* of being. Such attributes are three, viz., *unity* or oneness, *truth* or trueness, and *goodness*. We shall study the three transcendental properties of being in three Articles:

- Article 1. The Unity or Oneness of Being
- Article 2. The Truth or Trueness of Being
- Article 3. The Goodness of Being

ARTICLE I. THE UNITY OR ONENESS OF BEING

- a) Meaning of Unity
- b) Classification of Unity
- c) Individuality and Individuation
- d) Identity and Distinction

a) MEANING OF UNITY

When we speak of the unity or oneness of being we do not mean that all things are really one and that there is no real variety or multiplicity in the world. There have been, and indeed are, philosophers to propound this strange doctrine. We call these teachers *monists*, and their doctrine *monism*; the terms are derived from the Greek *monos* which means "one only," "single," "alone."

Monism has several varieties, although it is a doctrine which denies real variety. First, there is *materialistic monism* which ignores or denies everything but the bodily universe, and holds that things in this material world are no more different in their essences than biscuits from the same lump of dough or drops from the same sea. Then there is *pantheistic monism* which denies the existence of everything but God, and, in one way or another, identifies the world with God. A notable form of pantheistic monism is *idealistic monism* which denies the existence of the world as we experience it, and makes the universe a series or scheme of images in an Absolute Mind, that is, in God.

When we speak of the oneness of being we mean nothing monistic, nothing materialistic, pantheistic, or idealistic. We have already seen that all things are one only in the idea or concept of being and, even there, this oneness is not specific or generic but analogical. In reality as it exists outside our minds there

is not being but there are beings; not thing, but things.

By the unity or oneness of being (that is, by the transcendental unity of being) we mean that for a reality to exist or to be existible it must be that reality, that *one thing*, unbroken, undivided, unmultiplied or unrepeated.

Unity or oneness means undividedness and unrepeatedness. A thing is one, or has unity, inasmuch as *it is itself*, undivided into parts, and unrepeated as a plurality or multiplication or repetition of *itself*. To say that a reality has unity, therefore, is simply to say that the reality is itself, that it is this thing, that it is this one thing and no other. It is not suggested that a reality cannot be divided into parts if it has parts; it is only asserted that, as a fact, it is not divided into parts. Further, it is asserted that a unit (a reality which is *one*) is not at once itself and a repetition or multiplication of itself; it is not at once singular and plural. In passing, we must notice here that this self-evident doctrine which is derived immediately from the concept of being, and which is but a new way of expressing that concept, does not deny the possibility of a *multiplied presence* of one and the same unmultiplied reality. By a power greater than that which lies at the command of created natures, one single reality remaining that one single reality, may conceivably be present in more than one place. Thus the five loaves and two fishes which, at the command of Christ, fed a multitude of thousands, remained the

five loaves and the two fishes ; the Lord did not create new supplies of bread and fishes ; He multiplied *the presence* of the original five and two, and each of these served at the same moment as the food of many. Similarly, Christ is one Christ ; He is not multiplied into repetitions or multiplications of Himself ; this is manifestly a metaphysical impossibility. But His *presence* is multiplied in the Blessed Sacrament, so that the same Christ is truly and literally present in every consecrated Host and in every part thereof, though there be millions of consecrated Hosts existing at the same moment in the tabernacles throughout the world or within the bosoms of thousands who have just received Holy Communion.

Some realities cannot be divided into parts because they are not made up of parts. Such realities are called *simple*, in the original Latin sense of that term which means "uncomposed," "not compounded," "not made up of parts," and hence "indivisible." Such a reality is, for example, the human soul ; it cannot be divided into parts because it has no parts. But the unity of a reality does not depend upon its being a *simple* reality ; a reality, a being, has unity whether it be simple or compounded. The unity of a reality consists in its being *undivided* and unrepeated ; such unity consists in actual *undividedness*, not in *indivisibility*.

All *bodily* realities are made up of parts ; they are not simple but composed or compounded. Some

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writers like to call a bodily reality "a manifold" whether they are speaking of one body, such as an apple, or of the whole material world as one world. Such realities, such manifolds, may indeed be divided into their parts, but not into parts *which shall also be their complete original selves*. Each part, after division has been made, is one thing; it has unity as an independent reality; but each part is not the original undivided whole. An apple is one apple, but the pieces into which an apple is cut are not each one apple, and even if each part were an apple, it would not be the one identical apple which was first divided. Neither the separate pieces of the apple nor their aggregate or sum constitutes the one, complete, unbroken reality with which the experiment started. The aggregate of pieces is one aggregate; each piece is one piece and has its unity as such; but the apple is no longer the precise, unbroken, entire reality that it was at the outset. To begin with, there was an apple; now there are pieces of apple. To begin with, there was a thing; now there are things. An apple had being and unity; now pieces of apple have, severally, their respective being and unity.

A reality cannot even be thought of except *as itself*, as that thing, as that *one* thing, whether it be simple or compound, whether it be spirit or sand-dune, whether it be a blade of grass or a grassy plain, whether it be a drop of water or the mighty ocean, whether it be the infinitesimal heart of an atom or the

whole bodily universe. Whatever can be thought of as existing (i. e., any being) is necessarily thought of as *one*; it is necessarily one; whatever is existent or existible has *unity*. The very idea or concept of being makes this fact imperative and makes it evident. This sort of unity is called *transcendental* unity.

The classic definition of unity is *indivisio entis*, that is, "the undividedness of a thing in its being." A reality has unity inasmuch as it has undividedness and unrepeatdness in itself. Now, what is undivided in itself is, in this multiple world, immediately recognized as contrasted with other things, each of which is, in itself, undivided. Thus the immediate consequence of undividedness in a reality is its dividedness, or its being marked off as distinct, from everything else. Therefore, the definition of unity is properly rounded out by a phrase which indicates the distinction of a thing from other things, and we say that *unity is the undividedness of a reality as such or in itself, and its dividedness or distinction from all that is not itself*. The point is crisply expressed in the familiar Latin formula, *unum est id quod est indivisum in se, divisum a quolibet alio*.

Before taking up the classifications of unity, we must say a brief word about *unicity* or *uniqueness*. A thing has unicity, or is unique, when it is the *only thing of its kind*. Modern casual speech often employs the term "unique" in the sense of "unusual," "strange," "remarkable," or "notably fine." But,

while we would be foolish to quarrel with a usage long established, we must notice that the original and philosophical sense of the term "unique" is quite different from the casual and colloquial sense. *Unique* means *the only thing of its kind*. God is *unique* as well as *one*. But true uniqueness is almost unknown among earthly creatures. Every man is one, he has unity, but there are multitudes of men, each of whom is *identical in kind* with all other men; hence each human being is *one*, but he is not *unique*; he has *unity*, but not unicity.

b) CLASSIFICATION OF UNITY

We distinguish I. *Transcendental Unity* and II. *Quantitative Unity*. Further, we classify transcendental unity as 1. *Concrete Unity*, 2. *Abstract Unity*, 3. *Essential Unity*, 4. *Non-essential Unity*. Certain minor distinctions of these classes must also be made.

I. *Transcendental Unity* is the unity of a being as *such*. Every reality, every existent and existible substance or accident, every possible object of thought or fancy, is *itself*, is that *thing*, is that *one* thing and no other. Whatever exists, exists in the oneness of its being; whatever is existible, can come into existence only as that one thing. Thus we see that the unity of reality *transcends* the boundaries of genera and species, of classes and kinds; not this or that sort of being only, but *any* being, *every* conceivable being, has its unity. Even as the idea *being* soars over the limits

and boundaries of kinds and classifications, so *unity* (which is the synonym of *being*) soars over these limitations and applies to all reality. Rightly, therefore, do we name this unity *transcendental*. We say that transcendental unity is a *property* or *attribute* of being, because a property or attribute is that which belongs to a reality by natural necessity, and unity belongs by natural necessity to every being as such. Yet the terms *attribute* and *property* are used here *by analogy*, and not in strict and literal meaning. For transcendental unity not only *belongs* to every being; it is *identical* with the very concept of being. Inasmuch as a thing has being, inasmuch as it is itself, it is one, it has unity. The concept of being and the concept of transcendental unity are truly identical. Hence we see the justice of the axiom, *omne ens est unum; ens et unum convertuntur*, that is, "Every reality has unity; being and oneness are synonymous and interchangeable terms."

Transcendental unity is concrete or abstract, essential or non-essential.

1. *Concrete unity* is the unity of a thing (existent or existible) apart from the consideration of the mind. If, for example, a blue horse is to exist, it is to exist concretely in nature as an individual reality, and not merely as a mental concept. It will exist as an individual thing, not as a universal species or genus. Things which actually do exist,—whether simple or

compound, finite or infinite, spiritual or material,—exist as determinate things, and not as mental abstractions. In a word, each existing thing “in nature” has its own concreteness, its own individuality, its own *singular* or *numerical* or *real* or *concrete* unity. Concrete unity is the unity of an existent or existible thing *as such*, not the unity of a thing as conceived by the mind, or classified or predicated by the mind.

2. *Abstract unity* is the unity of a thing as conceived by the mind. The reality *man*, as grasped by the mind, has unity; it is one understood essence. Yet there are many men in nature outside the mind, each with his own individual and concrete unity. Tom, Dick, Harry, Mary, Jane, and Rose are concretely or individually distinct beings, each with its own proper concrete unity; but they are *one essential kind* of thing. Thus they are of *one species* (that is, they are inferiors of one specific idea or concept), and it is this essential kind that is represented by the mind’s grasp of the essence *man*. Therefore, while human beings are, in nature, distinct beings, and one is not the other, all human beings are *one* in the mind’s abstract concept of *man*, of *the human essence*. Human beings in nature are concretely or individually distinct, and each of them has concrete unity; conceptually or abstractly, all human beings are one; all are inferiors of the one idea; all are abstractly represented in the single idea *man*. The mind, as we have seen, conceives reality *in*

universal, but reality is existible only *in individual*. The unity of a thing as grasped by the mind (i. e., *abstract* unity) is the undividedness and unrepeatedness of the idea itself and as such; the real essence which the idea represents may be repeated indefinitely in individuals which exist (or can exist) in nature outside the mind. Thus the idea *man* is one (specific) idea and remains one idea, undivided and unrepeated in itself and as such; it has *abstract* unity. But the real essence *man*, which the idea represents, is repeated or multiplied in existing and existible human beings, each of which has its own individual or *concrete* unity as a reality "in nature." Thus, again, the idea *animal* is one (generic) idea, unrepeated in itself. But the real essence *animal* is repeated in all existible men and beasts, each of which has its own individual or concrete unity. Thus, finally, the idea *being* is one (analogical) idea, and it represents one essence. But, in reality, this one essence is repeated in every existible thing, each of which has its own concrete unity. We see from these examples that abstract unity may be *generic*, *specific*, or *analogical*. If the student will refer to Book First, Chapter I, Art. 1, c, he will readily understand that abstract unity may also be *differential*, *proper*, or *accidental*.

3. *Essential unity* is the oneness necessary to an essence. If the essence is a substance (as, for example, a man or a tree) its essential unity is also *substantial*

unity. If the essence is an accident (as, for example, whiteness or height) its essential unity is *non-substantial*, but may not be called *accidental*, for, as we shall see, the term *accidental unity* means *non-essential unity*, and we are speaking here of *essential unity*. The unity of an accident as such is essential to that accident. The whiteness of a substance,—say, of snow,—is not substantial; it is accidental; yet this whiteness has its being, and hence its unity, as whiteness and as this whiteness, and this unity is non-substantial but essential to the accident itself. However, in nearly every case where essential unity is thought of or exemplified, it is referred to a substance, and rightly so, since an accident has its real being dependently upon a substance, and its essential unity is thus actually referable to the unity of the substance on which it depends. Therefore, for practical purposes, the terms *essential unity* and *substantial unity* are regularly synonymous and interchangeable. Essential unity is often called *unity per se*, that is, “the unity of a thing which is one in itself”; it is also known as *unitas simpliciter*, that is, “unity simply so called.”

Essential (or substantial) unity is distinguished as follows: (a) The unity of *simplicity* is the unity of a substance which has no parts in itself and is therefore indivisible; it is the unity of a *simple* substance. Such is the unity of a soul, an angel, God Himself. (b) The unity of *composition* is the unity consequent

upon the merging or fusion of substantial elements in such wise as to constitute a new substance, that is, a substance not identified with any of the fused elements taken singly nor with their mere aggregate or sum. Thus a man is a substantial unit; he is a composite of body and soul; he is not body alone, nor soul alone, nor the mere sum of body plus soul; he is a single compound substance the elements of which are body and soul. The human substance has, therefore, the unity of *composition*. Every bodily substance is one by the unity of composition, for no such substance is simple; a body is always fundamentally composed of two substantial co-principles called respectively *prime matter* and *substantial form* (Cf. *Book First, Chap. II, Art. 2, d*).

4. *Non-essential unity* or *accidental unity* is the oneness of a plurality of things in some point that does not constitute them in a new substantial existence. Two horses hitched together; a number of apples heaped in a basket; a man with his name, age, height, weight, etc.,—these are examples of accidental units, and we speak of them as one team, one basketful, one human individual. Accidental unity is sometimes called *unity per accidens*, that is, “the unity of a thing by reason of accident”; it is also known as *unitas secundum quid*, that is, “unity after a fashion” or “unity under a certain aspect.”

Accidental unity has varieties, notable among which

are the following, which, as will be seen, are not perfectly exclusive all along the line, but, in some cases, may overlap: (a) *Collective unity* is the result of mere aggregation or juxtaposition, as in a handful of pebbles or a coachful of passengers. (b) *Natural unity* is the product of the forces of nature, as in a tree with its size, shape, number of leaves, etc. (c) *Artificial unity* is the product of human labor and skill (art), as in a radio, a watch, an automobile, an airplane. (d) *Moral unity* is the unity of a common purpose, the unity of human wills working together, as in a club, a sodality, a church, a trade union, a political party.¹

II. *Quantitative Unity* or *Predicamental Unity* is distinguished from transcendental unity which soars above classifications and is predicable of every being as such. Quantitative unity is proper to a special class or category of things, and does not soar above the

¹ It is manifest that the two sets of unities, viz., *abstract-concrete* and *substantial-accidental* may overlap. Unity, of course, cannot be at once concrete and abstract from the same point of view; neither can it be simultaneously substantial and accidental. But concrete unity can be either substantial or accidental; abstract unity too may be either essential or non-essential. John Jones, cantering in the park, presents the spectacle of substantial unity (for the man is a substantial unit; so is the horse) and of accidental unity (man-and-horse), and both unities are concrete. Abstractly considered, John and his horse are one in point of being animals; and when the mind adverts reflexly to this fact it notices that the unity in this case is *generic*; that is, man and beast are at one as inferiors of the genus *animal*.

boundaries of that class; it is properly predicable of *realities that have quantity* and of no others. Thus, strictly and properly, quantitative unity is predicable of material things alone, to things subject to measurement and to numbering of amounts, elements, and parts. However, by analogy, we use the terminology of quantitative unity in speaking of non-material things and in speaking of quantities abstractly. Quantitative unity is also called *mathematical unity*; it is the basis of counting, computing, numbering, measuring.

c) INDIVIDUALITY AND INDIVIDUATION

We have learned that a universal idea is the representation (or re-presence) in the mind of an essence regarded as capable of actualization in a plurality of things. Thus the universal idea *man* is a single representation in the mind, and it represents an essence that can be actualized in many beings outside the mind. Indeed, this idea represents an essence that is actually found in every existing human person, regardless of age, sex, color, culture, state, or condition. The essence thus represented by *the universal idea* is called *the universal*. In other words, *the universal* is the *object* of (or the essence represented by) *the universal idea*. When the universal represents a substance, it is called *substantia secunda* or *secondary substance*, and is thus contrasted with *substantia prima* or *primary substance* or the concrete reality which has the essence

in singular which the idea represents *in universal*. For example, the universal *man* (that is, the essence *man* considered abstractly) is a secondary substance, and each single existent human being is a primary substance. Now, this primary substance is what we mean by *an individual substance*, or simply *an individual*.

An individual substance has individuality; it has singularity. It has not only an essence which is (or may be) identical *in kind* with the essence of other things; it has its own concrete essence which belongs to itself alone and to no other. Thus, John Jones is *a human being*, and as such he is identical in species or in kind with every other human being; in this fact we discern his *specification*, that is, his assignment, so to speak, to a definite essential (i. e., *specific*) class of things. But John Jones is, in himself, a singular and concrete actualization of the essence *man*; he is this one human person and no other; in this fact we discern his *individuation*, that is, his assignment, not to a class, but to his place as a single existent member or item of his class. For John Jones is not only *a* human being in a general or abstract way; he is *this* human being in a singular and concrete way. If we ask *what* he is, that is, if we inquire after his essence, we seek to *specify* him, and to define him in terms of the universal; so we say he is "a man." If we ask *who* he is, that is, if we inquire which single one he is among the many with whom he shares a common specifica-

tion, we seek to *individuate* him. Our first question asks for his essence or species; our second question asks for his individuality. If we choose to be somewhat priggish, we may say that the first question inquires after the fundamental "whatness," and the second question inquires after the "thisness" of John Jones. His "thisness" is his *individuality*, that is, his state of being as this one person and no other; it is his numerical distinction as this one man among all existing men. It is, of course, manifest that we use the term *individuality* in no loose and casual way, as it is used in current colloquial speech to indicate a special force of character, or a notable originality in thought or speech or action. Every existing substance is an *individual*; every such substance, in every order of earthly being (lifeless, vegetal, animal, human), has *individuality*. Every such substance is of a *kind*, and that is its *specification*; it is a definite *one* of its kind, and that is its *individuation*.

It is of the very nature of *the universal* that it be *communicable*, that is, that it be capable of existing as shared unto things, participated in by things, communicated to things. Thus the universal *man* (that is, the essence represented in the mind by the universal idea *man*) is shared or communicated, so to speak, to all human beings, one equally with another, for all are equally human beings, equally *men*. Now, it is of the very nature of *the individual* that it be *incommunicable*, that it be incapable of being shared unto

things other than itself. The essence man (a universal) is shared unto all human beings (not *literally* shared, to be sure, since each human being has the entire and complete essence which the universal expresses) ; the concrete essence of this man Jones (an individual) is not capable of being shared at all.

It will be remembered from our discussion of the universal idea, that the universal (i. e., the object of the universal idea ; the essence which the universal idea represents) exists *formally* or *as such* (i. e., in true universality) in the mind alone ; it has solid grounds for its formation, in reality outside the mind, but it can exist *as a universal* only in the mind. Outside the mind, or "in nature," things can exist only in singularity or *as individuals*. Thus within the mind we have the grasp of the essence *man*, for example, in universal, and because of that grasp we know what *any* human being must be in order to be rightly called a human being. But in the trans-subjective world, that is, the world of knowable reality outside the mind, there are only *individual* human beings. So with all substances. The substances which our ideas represent exist (or are existible) only as individual realities outside the mind, and, as such, each of them is a primary substance ; but the mind conceives them abstractly and universally in its universal ideas, and the object of each universal idea (i. e., *the universal*) is a secondary substance. Now, the point to cling to here is this : the primary substance is so concretely

set in its own singular being that it is not *communicable*. It is not a "note" or a phase of something else; it has its own incommunicable being as this one single thing. Further, a primary substance, an individual substance, if it has the full perfection of individuality, is a *complete substance*; it is not merely an element or constituent part of something else. Thus, for example, a man's body is not the individual man, nor is man's soul the individual man; the individual man is the complete substantial composite of body-and-soul.

So much for *individuality*. We come now to the question of *individuation*. And on this point two questions present themselves: First, what makes an individual *knowable* as an individual; what *manifests* the individual; what *reveals* it to human knowledge? In the second place we inquire: what *constitutes* the individual formally or as such; what *makes* a thing individual? In answering the first question we state the *Principle of Manifested Individuality*. In answering the second question we state the *Principle of Individuation*, properly so called.

1. *The Principle of Manifested Individuality*.—It is evident to anyone who thinks even briefly about the commonest experiences of daily life that we recognize individual things and events by points that are accidental to them. For example, we know one person from another by such points as name, age, sex, appearance, sound of voice, and so on. We know one

tree from another by size, location, shape, appearance; we even recognize the botanical class of a tree (as an individual specimen) by certain accidental features. Now, the accidental marks or points by which we recognize an individual substance among other individual substances of the same kind are called "individuating marks" or "individuating notes," and these are summed up in an ancient Latin formula:

*Forma, figura, locus, tempus, stirps, patria, nomen:
Haec ea sunt septem, quae non habet unus et alter.*

We may translate the couplet freely as follows:

*Form, shape, place, time, blood, country, name,
In no two things are all the same.*

It is manifest that the doggerel refers, first and foremost, to individual human beings, but, by an obvious extension, it can be applied to all bodily substances. *Form* and *shape* (and *figure*) are much at one in their meaning, and we must remember that the *form* here mentioned is accidental, not substantial, form. Some writers say that *form* should be used for the bodily outline of artificial things (such as a house or a watch), while *figure* or *shape* should be referred to natural substances (such as a man or a tree); but the three terms are readily interchangeable in casual speech. *Place* and *time* need no definition here. *Blood*, of course, means ancestry, lineage, genealogy. *Country* means nationality, and *name* means both surname

and given name. In no two human individuals (and in no two individual substances) are *all seven* of these notes or marks found to be identical, not even in identical twins. For even twins cannot occupy the identical spot at the same time, nor can the closest resemblance amount to identity.

2. *The Principle of Individuation.*—Are the accidental features of a substance which enable one to *recognize* it as an individual to be considered the factors which *make* it an individual? Manifestly not. For an individual,—such as this man, or that woman, or the tree in the corner of the garden yonder,—is a substantial thing, a substantial item, a substantial *one* among all existing substances, substantially distinct from them all, even from those with which it has an identity of species or essential kind. Its individuation is therefore not a matter of mere accident. It is true that Tom and Mary and Joseph and Jane are only accidentally distinguished one from another as inferiors of the universal idea *man*; there is no essential or specific distinction among them. But when we consider them, not abstractly, but in their concrete existence as individuals, we plainly understand that the substance which is Tom is not the substance that is Mary; the substantial actuality which is Joseph is not the identical substantial actuality which is Jane. Though these persons do not differ in their essence, abstractly considered, they do differ in their substance, concretely considered. They do not differ essentially;

they do differ substantially. Therefore, the accidental features or points which manifest or reveal these persons as individuals will not suffice to establish and constitute their substantial distinction as individuals. Hence we must look beyond accidentals for our true *Principle of Individuation*, that is, for the true determining and constituting factor which *makes* an individual an individual.

Well, may not each individual bodily substance (for it is of such substances that we are here speaking) be constituted an individual by its own rounded reality; may not its individuality be a phase of its essence? This cannot be. For if a substance were individuated by its essence, there would be no possibility of other things having the same essence; each individual would be unique; it would be the only thing of its kind. Yet we know that trees are *all* trees; human beings are *all* human beings, equally, one as truly as another. For an essence *can be communicated*; it can be given to many; many things may be identical in point of essence. But we have seen that it is of the very definition of an individual that it *cannot be communicated*. St. Thomas Aquinas says, "That whereby Socrates is *a* man can be communicated to many; but that whereby Socrates is *this* man cannot be communicated to anyone but himself alone. If, then, Socrates were made *this* man by the same factor which makes him *a* man (i. e., by his essence), there could be no plurality of men any more

than there can be a plurality of Socrates." Therefore an individual substance in this bodily world is not made individual by its own essence. We must look farther for the true principle of individuation.

May not the existence, the actual *being here*, of a bodily substance be the principle of its individuality? No; for it is quite possible to conceive of individual substances as merely possible and non-existent, which would not be the case if existence were required to confer individuality. An individual substance *receives* existence; it is not constituted an individual by existence. But, it may be asked, may not the fact that a substance *can* exist be sufficient to individuate it; may not *possible* existence and not *actual* existence, be the true principle of individuation? By no means; for possible existence is not an individuating factor; it is common to all reality.

Scotus (d. 1308), one of the most profound of Scholastic philosophers, held that a certain quality of "this-ness" attaches to an existing bodily substance as a kind of property formally distinct from the essence or nature of the substance itself; it is this property which constitutes the individual as such. It is not certain, in the present stage of information about the doctrines of Scotus,—which are now being diligently investigated and reduced to pure form by Franciscan scholars,—just what is meant by a property "formally" distinct from the nature of a substance which it affects; the "formal distinction" of

the Scotistic system is still a difficult point to grasp. But it appears that such a principle of individuation would be an accidental rather than a substantial factor, and hence would not suffice to individuate substances. Without presuming to criticize the Scotistic doctrine, we may say that the current interpretation of that doctrine as touching individuation of bodies does not appear to be satisfactory.

St. Thomas Aquinas (1225-1274) proposes the principle of individuation most generally accepted among Scholastic philosophers. He teaches that an individual bodily substance is made individual by the fact that it is *a material thing with quantity*. The phrase used is *materia quantitate signata*, or, more simply, *materia signata*, which we may translate as "quantified matter." To forestall an objection at the outset, we do not say that *quantity* individuates bodily substances, for quantity is an accident. We say that *matter* (a substantial principle of bodily being) individuates bodies inasmuch as it is *marked by quantity*. Quantity is an accident, but it is proper to matter, and existing matter is necessarily quantified; it is such matter, such substantial reality, that individuates bodily substances. We offer a few points in explanation of this doctrine:

(a) If quantified matter (which is a bodily reality) is the principle of individuation, there can be no strict and literal individuation of complete spiritual substances. Each complete spiritual substance is con-

stituted as one thing by its own essence, and is therefore a *species* in itself. And so the term "angel" is not a universal term, like the term "man"; "angel" is indeed a collective term, and serves handily the requirements of our limited minds when we think and speak of pure spirits, but it is not a universal term with *individual* angels as its real inferiors. There can be no strict and literal individuation except in the realm of bodily substances. As regards human souls in the state of separation,—that is, the state which endures between death and the resurrection of the body,—it is to be noticed that each soul has a real relation to the actual material (i. e., the actual body) with which it was substantially united during earthly life, and with which it is ultimately to be joined again. By this real relation to the body, a soul is said to be individuated. Still, strictly and literally, it is *men*, and not souls, that are truly individuals.

(b) A bodily substance is fundamentally constituted by the union of prime matter and substantial form. The substantial form is the determining principle, the active substantial factor which makes the substance the essential kind of existing body that it is. Hence the substantial form constitutes the body in its actual and complete essence, i. e., its *species*, and we therefore call the substantial form the *Principle of Specification*. But to constitute the substance in its singular and concrete existence, the substantial form requires what may be called the coöperation of mat-

ter. Matter (i. e., prime matter) is wholly passive and potential, incapable of independent existence and activity. But unless matter be there to receive the actualizing action of the form, the proper function of the form itself is baulked. Hence, while the term "coöperation of matter" may appear a strong one, it is manifest that we do not assign any *action* to matter, but a passive coöperation only. The matter must be there with the form, before the form can constitute the actual body. It is in-formed matter that makes the bodily substance, and it is *in-formed matter* that is individuated. Now, the form of any individual body might conceivably have been conjoined with some other quantity of matter, and in that case the emerging individual would not be, in all respects, *this* precise individual reality as now we find it. It is rather, therefore, the matter than the form that ultimately constitutes the individual; not pure matter, indeed, but matter subjected to quantity under the actualizing action of the form. The *matter as quantified* constitutes an individual bodily substance. Father Lortie (*Elementa Philosophiæ Christianæ, Vol. I, p. 372*—edition 1929) has this to say: "The principle of individuation in bodily substance is not matter alone nor quantity alone, but matter under the mark or limitation of quantity. Matter is said to individuate a bodily substance in a basic or primary sense, while quantity is the individuating factor in a secondary sense. The

root of individuation, in so far as this involves *incommunicability*, is matter; and the root of individuation, in so far as this implies being marked off from other things, is measurable quantity. Hence the principle of individuation is *matter marked by quantity*." The quantity here mentioned is, of course, the tri-dimensional quantity found in every bodily substance.

(c) When we say that quantified matter is the principle of individuation, we do not mean that a certain and definite *amount* of matter, capable of clear expression in terms of cubic inches, yards, or meters, enters into individuation. A baby changes its measurements constantly, but its individuality is not changed at all. Of course, there is an *accidental* change as the amount of matter increases with the baby's growth, but the child itself, as a bodily substance, retains its individuality through life as *this* individual, *this* human being. The *amount* of matter necessary for any given substance doubtless lies between a more or less definite minimum and maximum, but the terms of this amount in units of measurement are not available, nor necessary, for quantification and for individuation. *Quantified matter* is matter subject to the three dimensions. It is measurable, indeed, but does not necessarily have *just these dimensions*, which at a given moment it actually possesses, to constitute the individual substance. It is true that trees, for example, have certain maximum and minimum amounts of matter in their actual being. But if the oak by the

roadside should suddenly, and miraculously, grow to the height of one mile, it would still be *this tree*. Therefore, the individuality of the tree is determined, not by the fact that it has *this much matter*, in its make-up, but by the fact that it has *this matter*, which happens, at the moment, to have these precise measurements.

(d) *Accidents* are said to be individuated by their inherence in individual substances. The whiteness of a snowdrift is the individual whiteness of *this snowdrift*; the whiteness of the page before my eyes is the whiteness of *this page*. Further, accidents are individuated by their *space* and *time* relations to individual substances in which they occur. Thus the action of swinging one's arms is a series of individual swings, each distinct as an individual action from the others by reason of the fact that the movements are not identical in time. The term "individual" may be applied as an adjective to accidents, but not as a noun, for "individuals" are, strictly and properly, bodily substances.

d) IDENTITY AND DISTINCTION

I. *Identity* is a term derived from two Latin words (*idem*, and *entitas*) which mean "the same thing" or "the same entity." Inasmuch as a thing is itself, it is *identical* with itself. This is not a senseless mumbling of words. For the mind may view severally, or under different aspects, what is really one in itself, and thus

a special act of mind is required to hold in view the fact that what the different aspects present to knowledge is truly *one*, is truly *identical*. On the other hand, things really distinct and even separate in the realm of nature outside the mind may be *identified* in the abstract view, grasp, or concept of the mind. Father Coffey (*Ontology*, p. 136—*edition 1918*) says: "When we think of a being as one we must analyze it further, look at it under different aspects, and *compare it with itself* before we can regard it as *the same* or *identical* with itself. Or, at least, we must think of it twice and compare it with itself in the affirmative judgment 'this is itself,' 'A is A,' thus forming the logical *Principle of Identity*, in order to come into the possession of the concept of identity."

The identity of a thing with itself in the order of nature outside the mind (or simply "in nature," as the saying is) is called *real identity*. And yet the term identity necessarily involves the mind in the act whereby we "think of the thing twice and compare it with itself." The fact that a thing *is what it is* in nature, independently of the mind's consideration, indicates its *unity*; the fact that it is recognizable by the mind as existing (or existible) in real unity in nature, indicates its *identity*. On the part of the thing itself, that is, on the part of the object in nature, this identity is *real*; on the part of the mind which recognizes it, this identity is *logical* or *formal*.

When one and the same objective reality is regarded under distinct aspects by the mind, we say that the identity of the object is *real* but not *formal* or *logical*. Thus the identity of "Franklin D. Roosevelt" and "Our President" is a real identity, for, as a matter of objective fact, the one person is both Franklin D. Roosevelt and the President of the United States. But one might know Franklin D. Roosevelt as *this person* without knowing him as *this president*; the mind may think of him in his *personal*, and not in his *official*, character. Thus there is a distinction in the mind between the person and the president, although as a fact in reality, this person *is* the president. Hence we say that there is a *real* identity but not a *formal* (or *logical*) identity in the two concepts "Franklin D. Roosevelt" and "Our President."

We see, then, that identity may be *real* without being *formal*. Conversely, identity may be formal without being real. Washington, Adams, Jefferson, Lincoln, Wilson, Roosevelt, and others, are *all identified* in the concept "President of the United States"; they are seen in formal or logical identity. But, manifestly, these are different persons, not identified but distinct and separate in the real order of things. Hence we say that their identity is *logical* or *formal*, but not *real*. Take a further example: All human beings are at one, all are *identified*, in the concept or idea *man*; this is *formal* identity. But each man is an individual

in nature, really distinct from every other man and from every other substance; hence men are not *really* identified.

Logical or formal identity is a matter of degrees or of kinds. For example, all men are identified formally in the specific concept *man*; this is *specific identity*. All men and beasts are identified in the concept *animal*; this is *generic identity*. All the presidents from Washington to Roosevelt are identified in the concept *President of the United States*; this is *accidental identity*.

Generic or specific identity is *essential* identity; all other degrees or types of formal identity are *non-essential* or *accidental*. Any accident may be a point of identity in a group: for instance, leaves, wind, running water, a racing horse, a planet, are all identified inasmuch as all are subject to *movement*. White men are identical in color. Catholics are identical in faith. Of all points which serve as the basis of accidental identity, *quantity* and *quality* are the most notable. Things identical in *quantity* are said to be *equal* or to have *equality*; things identical in *quality* are said to be *alike* or *similar*. Between a pound of sugar and a pound of rice there is an *equality* (these things are identical in quantity, i. e., in weight); so also, between a six-foot rod of iron and a tree six feet high there is an *equality* (these objects are identical in quantity, i. e., in height or length). But between two persons that look alike there is not equality, but *simi-*

larity, for resemblance is a relation based on quality.

In all this, we have been considering being as *static*. The Principle of Identity thus abstracts from the fact that creatural being is steadily subject to change and is continually undergoing change, substantial or accidental or both. The very nature of the discussion imposes upon us the necessity of making such an abstraction. Nor do we therefore falsify reality or regard it in a distorting light. For no human mind can deal with reality at all, even with the reality called change, without holding it steadily and unchangingly before the mind's attention. For the rest, actuality is as true a fact as potentiality in the world of real beings. The student is referred to Chapter II, Article 2, of the First Book.

II. *Distinction* is the absence of identity in a plurality of things. The idea of distinction is bound up with that of identity as its correlated opposite. When we assert the Principle of Identity ("A is A"; "A thing is what it is": "That which is, is") we implicitly assert the Principle of Distinction (*Cf. Book First, Chap. I, Art. 2, d*). For the assertion that a reality is itself, is an implicit assertion that it is *not* anything other than itself.

Distinction is *real or logical*.

1. *Real distinction* is the distinction which exists between thing and thing. It is the lack or absence of

identity between things existible in nature, independently of the view of the mind. Thus there is a real distinction between Tom and Harry, and between a house and a hill. But real distinction does not always indicate *separate* things, nor even *separable* things. Thus between a man's soul and his body there is a real distinction but not, while the man lives, a separation. Thus again, between the shape of a pictured circle and the color in which it is drawn there is a real distinction, but these things (the shape and the color of this picture) are not physically separable. Real distinction is *major* or *minor*.

(a) A *major* real distinction is a distinction between one thing and another. Thus the distinction between two apples, or the distinction between an apple and its flavor, or the distinction between a substance and its parts, or the distinction between two parts of the same substance, or between a substance and its absolute accidents, is a major real distinction.—(b) A *minor* real distinction is a distinction between a reality and its mode of being. Thus the distinction between the movement of a flying bird and its rate of speed is a minor real distinction; for the speed or velocity is but a *mode* of the movement. Again, the distinction between the curvature of a line and its degree of curvature is a minor real distinction; so is the distinction between a man's health and the state or degree of his health.—A major real distinction is sometimes called an *entitative* or *absolute* dis-

tion; a minor real distinction is often called a *modal* distinction.

2. *Logical distinction* (called also *distinction of reason* or *rational distinction*) is a distinction between or among different aspects which the mind finds in the same thing. It is the lack of identity between or among concepts of what in reality ("in nature") is one and the same. Logical distinction is either *purely logical* or *logical with a basis in reality*.

(a) A *purely logical* distinction has no foundation in reality outside the mind; it is a distinction made by the mind for its own requirements (for purposes of closer study and investigation) or is required by the mind because of the limitations of human understanding. Thus when we analyze and define one idea in terms of another, the idea defined and the essential definition indicate an identical reality, but they present to the mind logically distinct concepts. Thus when we define "man" as "rational animal" there is no distinction, but real identity, in the object, the *thing*, indicated by both terms, i. e., by both "man" and "rational animal." For the second term ("rational animal") is an essential definition of the first ("man"), and between a thing and its essential definition there must be absolute real identity. Yet "man" and "rational animal" are logically distinct concepts, inasmuch as one is an essence viewed simply in its complete total-

ity, and the other is the same essence viewed more penetratingly and understandingly in its elements. The foundation for this sort of distinction is not in the identical reality considered, but in the mind itself and in the requirements and processes of the mind. Such a distinction is, therefore, *a purely logical distinction*; recall that the Greek word *logos* (and hence the English *logical*) is expressive of what belongs to mental requirements and processes. Such a distinction is also called, "a distinction of reason without a basis in reality," or, in the old Latin formula, *distinctio rationis sine fundamento in re*. This (purely logical) distinction is also known as, "a distinction ascribable to the mind of the person making it," or, in the Latin phrase, *distinctio rationis ratiocinantis*.

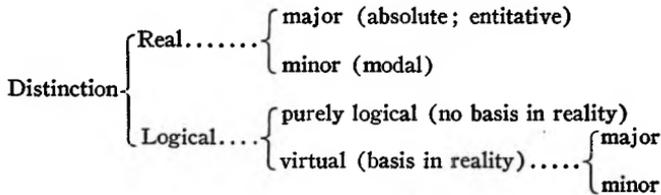
(b) A logical distinction *with a basis in reality* is one for which the mind may find justification in the reality itself which is considered, even though the points distinguished are not really distinct. Thus, for example, we make a distinction between God and His attributes, or between God's mercy and His power, although we know that in God there is no real distinction except that which exists among the Three Divine Persons. God is simple; all that God has He *is*; there is perfect identity between the Divine Substance and the Divine Attributes, and so, of course, there is perfect identity among the Divine Attributes themselves; all are identified in the Divine Substance. Yet, despite this real and perfect identity, God stands

revealed in His creation in a manner that may be called piecemeal; the world shows its Creator as supremely knowing or intelligent, as supremely powerful; man's history shows God as most wise and provident, most good and merciful. Thus God affords the human mind what may be called *really distinct aspects* of His infinite identity. True, this piecemeal view of what is in Itself a perfect identity, is due to the limitations of the human mind, yet not entirely so; for the aspects we take of Infinite Being are justified in that Being Itself. To use a very imperfect simile, a diamond is a single stone, but it may flash out from its facets a variety of dazzling hues. That we perceive different colors is indeed due to the fact that we view the diamond from different angles; yet there is a foundation in the gem itself for the varying views, since it is really manifested or revealed as glowing, now with this color, now with that. Take a further example of logical distinction with a basis in reality: *Man* is defined as *rational animal*. Now, between man's animality and his rationality there is no real distinction, for these are not physical parts or elements of man's essence, as body and soul are. Yet there is here a rational or logical distinction, not entirely ascribable to the mind which makes it. For man has real aspects, real points to justify the view of the mind, in which he may be seen now as animal, now as rational. Hence we say that the distinction here in question is a distinction of reason (or a logical dis-

tion) with a basis in reality. The old Latin phrase for this distinction is *distinctio rationis cum fundamento in re*. Sometimes this distinction is called, "a logical distinction based upon the object in which points are distinguished," or, *distinctio rationis ratiocinatae*. This distinction is also, and most commonly, known as a *virtual distinction*.

Now, when the points distinguished by a virtual distinction are such as to include one another of necessity, so that, in the reality considered, these cannot exist separately, nor can they exist separately even in different things than the reality in which the mind distinguishes them, we have a *minor virtual distinction*. Thus the infinite attributes of God are really identified in God, nor can any one of these infinite attributes exist in another being than God, nor, if it could, would it be able to exist apart from all the other infinite attributes. But when the points distinguished by a virtual distinction do not, of necessity, include one another, but may be found, one without the other, in other things than the reality considered (and in which the distinction is made), we have a *major virtual distinction*. Thus animality and rationality are distinguished in man; for in beasts we find animality without rationality; animality does not of necessity include rationality (although it does *in man*).

The following schema may help the student to fix in memory the classification of distinctions:



Closely allied to the subject of individuality, and of identity and distinction, is that of *multiplicity* or, more properly, of *multitude*. A multitude is a plurality of units or individual things, each of which is unidentified with (is really distinct from) the others. Thus it appears that the idea of multitude is at least indirectly implied in the idea of individuality and in that of identity and distinction. A multitude, inasmuch as it is measurable by a unit (that is, by one of the individual items or instances that compose it) is called a *number*. Therefore a number is defined as "a multitude measured by one." In figuring, that is in measurements of quantities in the abstract or in concrete, we employ numbers, and each of these is either a sum of ones (of units) or a division of ones (of units).

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of unity or oneness. We have seen that *transcendental unity* is synonymous with *being* itself, so that a being as such is necessarily one. We have classed tran-

scendental unity as *concrete* and *abstract*, *essential* and *non-essential*, and we have made certain sub-classifications. After studying transcendental unity, we have discussed *quantitative (mathematical) unity*. We have investigated the question of *individuality and individuation*, and have established the principle of individuation among bodily substances as *materia signata*, that is, matter marked or conditioned by quantity, without, however, involving set and determinate measurements of the quantity. We have noticed the principle of manifested individuality, and have listed the *individuating notes* by which each individual is recognizable among those with whom it has a common essence or specific nature. We have studied *identity* and *distinction*, and have noted that each is *real* or *logical*. We have made important sub-classifications of distinction, especially of logical distinction, which is either based on reality (*cum fundamento in re*) or is due entirely to the needs and limitations of the mind (*sine fundamento in re*). We have added a word on *multitude* and *number*.

ARTICLE 2. THE TRUTH OR TRUENESS OF BEING

- a) Meaning of Truth
- b) Classification of Truth
- c) Falsity

a) MEANING OF TRUTH

Truth is the relation of equality, of adequation, of equalization, of exactitude and justness, which exists

between a thing and the mind which knows that thing. Thus truth may be roughly compared to a line that is stretched, straight and taut, between two posts. The one post is a knowing mind, a mind not deceived or misinformed. The other post is a reality about which the mind possesses adequate and justified knowledge. And the taut line between the posts is an illustration of the direct, unequivocal, clear-cut relationship between the knowing mind and the reality known; in other words, it is an illustration of *truth*. Let us choose another simile, less clumsy perhaps than that of the two posts and their connecting line. Between a yard of cloth and a yard-stick there is equality; it is not the stick nor the cloth but the *relation of equality* in measurement between the stick and the cloth which determines a true yard of cloth. Now, it is not the knowing mind nor the thing known which constitutes truth, but the relation of equality, or "the adequation," between the mind and the thing known. Truth is therefore accurately defined as "the adequation of the mind and the thing known by the mind." Truth is thus seen to consist in a relation between a knowing mind (that is a *judging* mind, a mind which *judges* the thing known to be what it really is) and an object, a reality known. The ancient Latin definition of truth is *adequatio rei et intellectus*, that is, "the adequation, the squaring-up, of a thing and the mind that knows it."

Truth involves, of necessity, not only things, but

mind. Now, the relationship of reality to the mind is twofold. Things (i. e., reality) may stand in a relation of *dependency upon mind for their being and existence, nay, for their very possibility*. Such a complete dependence of things is ascribable to no finite mind, no created mind. But there is necessarily such a complete dependence of creatural reality upon the Divine Mind, the Infinite Mind, the Creator. Finite reality ultimately depends upon God for its being and for its possibility (*Cf. Book First, Chap. II, Art. 2, c*). Finite things exist as the product of their causes, and they are ultimately the product of the First Cause, which is God. Now, God is Infinite Knowledge; He knows all things in Himself, in His own essence, from eternity. Hence God perfectly knows all creatures before they come into existence. He holds in Himself, so to speak, the plans and models and patterns (called "archetypal ideas") according to which creatures are to come into existence, and according to which they do, as a fact, come into existence. Thus, the first relationship of reality to mind is the relationship of created reality to the Creating Mind. This is a complete, *per se*, dependency. Things (finite realities) are what they are because of the Mind which knows them, for what they are and gives them existence in accordance with that perfect and eternal knowledge. Now, the relationship of things to the Divine Mind is called *absolute truth*, or *ontological truth*. In a manner analogous to that in which things depend for existence

on the First Cause, they may be said to depend upon their efficient secondary causes. Thus, a house must be first known in plan and specification (at least in a general way) before it can be built. The knowledge precedes the production of the reality; the knowledge is the norm or measure to which the reality is to measure up. Here again is a dependency (less absolute indeed than the dependency of things on the Divine Mind) of certain creatures upon secondary causes. And the relationship of such creatures to the finite mind, the knowledge, of their producing (secondary) causes is *truth*, and *ontological truth*.

The second way in which reality may be said to stand related to mind, or even to depend upon mind, is that of *dependency for being known*. In so far as this involves the First Cause, it is the identical relationship we have already considered, for things *must* be known to the Divine Mind if they are to be existible. But things in this universe can exist whether creatures know them or not. There are objects on earth, and areas of the earth's surface, that have never been seen by any human being; but these objects are not deprived of existence by that fact. Things can exist whether man knows them or not. Yet to exist *as humanly known* objects do depend upon man's knowing them. They have a dependency, therefore, not for *being*, but for *being known*, which relates them to the creatural mind. This is not a *per se* dependency, but an accidental one, a *per accidens* de-

pendency. And in this dependency, this relationship, we discern *truth*: that is, this dependency indicates that there can be an adequation, a squaring-up of objects thus knowable and the mind thus able to know them, and when this adequation is verified, we have *truth*.

Truth, we repeat, involves not only reality but mind. And yet there is no real distinction between reality as *being* and reality as *true*. Being itself, inasmuch as it is knowable, is *the true*. And being, inasmuch as it is being at all, *must* be knowable and known to the Infinite Mind. The aspect of *the true* (or simply of *trueness* or *truth*) adds nothing new, nothing alien, to the concept of being when fully understood. Thus *being* and *the true* are synonymous terms. For a being is what it is; the Infinite Mind necessarily knows it for what it is; the being depends for its being-ness (its very possibility) upon the Infinite Mind. Hence, being as such is necessarily present in the Infinite Mind as *true*, as truly known, as known and judged upon in the completest, most essential, most exact, most exhaustive manner. *Being* and *the true* are therefore only two aspects of one and the same thing; there is but a logical distinction between them, not a real distinction. For this reason we say: "Every being is true; *the true* and *being* are interchangeable terms," or, in the old Latin formula, *omne ens est verum; ens et verum convertuntur*. The truth of being, or, more precisely, the aspect of being as

the true is a transcendental concept, even as *being*, its synonym, is a transcendental concept. And the truth here designated is, as we shall see, *absolute* or *metaphysical* truth.

b) CLASSIFICATION OF TRUTH

Truth is classified as *ontological*, *logical*, and *moral*.

I. *Ontological truth* (called also *absolute* truth, *metaphysical* truth, the truth of things) is the squaring-up of things with the Divine Mind. In a secondary way, ontological truth is the adequation or squaring-up of things with the human or the angelic mind (i. e., the creatural mind). When we speak of "true friends" or "a true circle" or "true gold" we indicate ontological truth. We have seen that all truth is a relation between a mind and reality. Now, when the mind is in possession of knowledge, and when it uses this knowledge as a test or standard to which an object must measure up, the object so measuring is called true with *ontological* truth, or the truth of things. Thus, if I know what gold is, I am in possession of knowledge which serves me as a measure or standard by which I judge whether a given bit of metal is *true gold*. If I know what friendship is, I know my "true friends." If I know what a circle is, I use that knowledge as the test or measure whereby I judge a given plane figure as a true circle or not a true circle. Ontological truth is the truth of things inasmuch as these measure up to the

knowledge of the judging mind. Now, things *must* measure up to the knowledge of the Divine Mind; there is no possibility of their not so measuring, since things depend for their being (i. e., for their very possibility) upon the Divine Mind. Hence, ontological truth, inasmuch as it is understood in its primary sense as an adequation of things with the Divine Mind, is *necessary* truth, *absolute* truth. It is the truth *of things*, the truth whereby *being* is necessarily *true*.

2. *Logical truth* (called also *conceptual* truth, truth *of thought*) is the adequation or squaring-up of the mind with reality. Properly, logical truth is the truth possessed by a finite mind, a mind that has *learned* what a reality is. In ontological truth, the knowledge is the standard to which reality must measure up and by which it is judged; in logical truth, the reality is the standard to which the creatural mind must measure up. Ontological truth is the truth *of things*; logical truth is the truth *about things*, the truth of thought or judgment about what things are. When you say, "This is true gold," you mean, "I know what gold is; my knowledge is the standard to which this substance must measure up or it is not gold at all; I find that it does measure up to my knowledge, and therefore I pronounce it gold"; you declare that the object, the thing, squares with the judgment of your informed mind; you indicate *ontological* truth, the truth *of things*. When you say simply, "I know what gold is," you mean, "I have learned from the object (i. e.,

gold) what it is; my mind has conformed itself to that object and laid hold of it cognitionally; my knowledge about it is true knowledge"; you declare that the judgment of your mind squares with the objective thing judged; you indicate *logical truth*, the truth *of thought* about things, the truth *of knowledge*.

3. *Moral truth* (called also *ethical truth*, *truthfulness*, *truth of speech*, *veracity*) is the adequation, the squaring-up, the agreement, of the words of a speaker or writer with his mind, his state of knowledge. Moral truth is fully discussed in that part of philosophy which is called Ethics or Moral Philosophy.

The root and basis of all truth (ontological, logical, moral) is God, the First and Eternal Truth. Moral truth (truth of speech) requires knowledge; one cannot speak intelligently without knowing what one says. Thus moral truth in its perfection requires logical truth as prerequisite. But truth of knowledge, truth *about* things, presupposes the truth *of* things; there is no true knowledge that is not based on reality as it is; knowledge cannot square with reality unless reality is there to be known. Thus moral truth depends on logical truth; logical truth depends on ontological truth; ontological truth, as we have seen, depends upon the Divine Mind, upon God, who knows all reality from eternity and in full perfection, and who is Himself the root principle of possibility. Therefore, upon God, the Infinite Mind, all truth ultimately depends.

c) FALSITY

Falsity is the absence of truth. Academically speaking, therefore, there are as many types or classes of falsity as there are classifications of truth. Thus we distinguish *ontological*, *logical*, and *moral* falsity.

1. *Ontological falsity* would be,—were it possible,—the lack of conformity between reality and the Divine Mind. Such lack of conformity, however, is utterly impossible. For *reality* or *being* is possible only in so far as it is known; the Divine Knowledge, or the Divine Mind, is the root of possibility, as we have seen. Being as such is necessarily true with ontological truth. Hence there is really no such thing as ontological falsity. Yet we do speak of the falsity of *things*, as, for instance, of false teeth, or false whiskers, or false friends. But this is merely a trick of speech; we do not really mean that the things called false *are not what they are*,—a manifest contradiction in thought and in terms; we merely mean that certain things have an appearance which may easily lead the unwary to a *false judgment about them*. But a false judgment is *logical* falsity, not *ontological* falsity.

2. *Logical falsity* is the lack or absence of logical truth. It is not the mere absence of knowledge, for such absence is not falsity, but *ignorance*. Rather it is a misapplication of knowledge; a judgment made with the conviction that it squares with the thing judged, whereas it does not. Logical falsity is *error*; it is er-

erroneous judgment. Logical falsity is quite possible, and indeed it is a common weakness of mankind. True education seeks to dispel both ignorance and error; its aim and purpose, as far as the mind is concerned, is to afford logical truth and dispossess the intellect of the disease of logical falsity. The point here to remember is this: error is always logical, never ontological. It is always error in the judging mind (of a creature), never error in the essence of things. Things are what they are, inevitably and infallibly; they have ontological truth; nothing is self-contradictory or erroneous in itself.

3. *Moral falsity* (called also *lying, mendacity, untruthfulness, ethical falsity*) is the conscious lack of conformity between the statement of a speaker or writer and his knowledge. Like moral truth, moral falsity is discussed in the science of Ethics.

SUMMARY OF THE ARTICLE

This short Article has brought to our attention some important points of doctrine. We have learned the nature of *truth* as an adequation or conformity which exists between mind and reality. We have seen that this adequation is *necessarily* present when there is question of the Divine Mind, and this necessary truth we have called *ontological* or *metaphysical* or *absolute* truth; it is the truth *of things*; it is the truth that necessarily belongs to being and is synonymous

with being. Thus we have learned the axiom, *omne ens est verum; ens et verum convertuntur*. We have discussed the truth *about* things, which can be possessed by the creatural mind; this we have called *logical* truth; it is the truth *of thought*, the truth *of knowledge*, the truth *of judgment*. With truth we have contrasted *falsity*, and have found that ontological falsity is utterly impossible.

ARTICLE 3. THE GOODNESS OF BEING

- a) Meaning of Goodness
- b) Classification of Goodness
- c) Evil

a) MEANING OF GOODNESS

Transcendental goodness which, as we shall see, is but a phase of being itself and is in reality identified with being, consists in the fact that being in general, and any being in particular, can answer a tendency, a natural desire or appetite. This is a loose-sounding description, and we must make it definitely intelligible by approaching the question of goodness in a somewhat circuitous manner.

When is a thing called good? First, when it *pleases*, when it is enjoyable, when it affords satisfaction. Thus we speak of a good dinner, a good vacation, a good time; thus a child calls candy good, and children of a larger growth speak of a good discussion, a good sermon, a good view, a good play; and the Victorian lady used often to admit the satisfying experi-

ence of "a good cry." In the second place, a thing is called good when it is *useful*, and when it has all the qualities that fit it for its proper use. Thus we speak of a good broom, a good house, a good car, a "good fit," a good rain. And inasmuch as a thing is not wholly fitted for its proper use it is lacking in goodness, and we say that it is "no good." Further, we call a thing good when it serves a good *purpose*. Thus a certain food, although unpalatable, may promote health-giving or health-preserving activities in the body, and we say that it is good food, in spite of the fact that it does not please our palate. Again, a thing is good when it meets the requirements of the *moral law*. Thus we speak of a good life, a good thought, a good action. We may sum up all these aspects of good in a practical, if not exhaustive, way, by saying that a thing is good (*a*) when it gives pleasure or satisfaction; (*b*) when it has all requisites for its proper use; (*c*) when it actually serves a good end or purpose; (*d*) when it squares with the rational requirements for proper human (i. e., moral) conduct.

Now, in all the phases or types of goodness here considered there is a common point, a common character. It is this: a good thing answers a natural appetite, tendency, or desire. For it answers an appetite or tendency for satisfaction, for fit and useful things, for a suitable end or goal, for suitable human conduct. The note of *satisfaction*, of filling out a need, of answering a requirement, of meeting a tendency, is

in all the phases and all the types and examples of good we have considered and in all we could consider. Good answers tendency or appetite. In this fact we discern its fundamental nature. Upon this fact we frame its essential definition. Aristotle was right when he said, "Good is what everything tends to or desires."

Regarded in this fundamental way, *good* is manifestly a synonym for *being*. For every being (inasmuch as it is *actual*) is capable of answering a tendency, desire, or appetite. And even as *potential* (i. e., as possible) a being bears a relationship to actuality and to the capability of answering a tendency which comes with actuality. Actual being is *there*; and what is there can be aimed at, can be the goal of tendency or appetite. Hence actual being, in so far as it is being at all, is desirable or *good*. And potential being is, in the exact measure of its potentiality, also good or desirable; it is potential good. Hence it is just to say that being and goodness, or, more exactly, being and *the good* are interchangeable terms. The old Latin formula is, *omne ens est bonum; ens et bonum convertuntur*, that is, "Every being is good; *the good* and *being* are synonymous."

Take another view of this same truth: We discern purpose in things; we see about us an ordered universe; things tend to their ends, their goals, and all, literally, "work together unto good." Therefore there is in things a tendency or inclination or appetite by

which they seek their ends, and the ends are therefore *good*. And the beings which seek their ends are themselves elements or units in an ordered and complex universe, and each of them serves in its own way the needs of other things, and is, in so far, an end, a desirable thing, a *good*. Anything that exists or can exist can be the object of a tendency or appetite; and only in the measure in which a being exists or can exist can it be such an object. But anything that exists or can exist is *being*. Therefore *being* and the *good* are synonymous terms. This is not goodness (or *the good*) of a certain type, but goodness in its root-meaning; goodness that transcends the boundaries of type and class; goodness that is *transcendental*. And it is of this transcendental goodness that we speak when we say that goodness and being are not *really* but only *logically* distinct. *Omne ens est bonum; ens et bonum convertuntur.*

b) CLASSIFICATION OF GOODNESS

Goodness is classified as *metaphysical*, *physical*, and *moral*.

1. *Metaphysical goodness* (*ontological* goodness; *transcendental* goodness) is that goodness which we have seen to be synonymous with being. Metaphysical goodness is, first and foremost, synonymous with *actual* being. It extends, however, to *potential* being inasmuch as this being involves a direction and order towards actual existence. Thus *metaphysical* or *trans-*

cidental goodness is a complete synonym for actual being; in only a secondary way does it extend to potential being, for potential being, lacking actuality, lacks perfection which is the measure of actual goodness.

2. *Physical goodness* is the perfection of a being which has all the rounded completeness which its nature requires. Any lack of a natural requirement is a lack of goodness, and such lack or absence of being (i. e., perfection) is not good but evil. Thus we say that bread is good bread when it has all the qualities and perfections that its nature as bread requires. If something is lacking in its "rounded perfection" we say that, in so far, the bread is not good. Indeed, we sweepingly declare, "This bread is *no good*." And here we discern the meaning of an ancient axiom, *Bonum ex integra causa; malum ex quocumque defectu*, that is, "A thing, to be good, must be wholly and completely good; it is spoiled (made bad) by any defect." We shall see the justice of this axiom again, when we speak of the opposite of goodness, that is, of evil. We speak of *physical* goodness when we say that our health is good, or that our motor car is a good one, or that the carpenter has done a good job. When all the parts, elements, qualities, that should be present to a thing are actually there, then the thing has physical goodness. When a thing has all that it needs to fulfill its use or its purpose, it has physical goodness. Thus we see that there can be such a thing

as good food; we also see that there can be such a thing as good poison.

3. *Moral goodness* is the perfection which accrues to free human activity from the fact that such activity squares with the requirements of the moral law. Free human activity means all deliberate human thoughts, desires, words, deeds, omissions. And the requirements of the moral law (which is fundamentally God Himself, viewed as Divine Reason and Will, that is, as the Eternal Law) are manifested proximately to man by *conscience*, that is, by *human reason* pronouncing upon the lawfulness or unlawfulness of a situation here and now to be decided. Thus moral goodness is the goodness of human conduct which is in line with conscience. The absence or lack of moral goodness is moral evil or sin.

In addition to the classification of goodness just given there are certain other classes (sub-classes, contained under the headings of physical or moral goodness) which we must notice here:

(a) A thing chosen as a suitable means to an end has the goodness of *utility*. It is called a *bonum utile* or "a useful good." Thus a good broom not only illustrates *physical* goodness, but *useful* goodness. Thus, again, a painful and dangerous operation is, however undesirable in itself, a *useful* good; it is *good as a means* to the recovery of normal functions.

(b) A thing chosen for its own sake (and not as a means to something else) is a *proper* good. It is called

a *bonum honestum* or "a seemly and fitting good." Thus life and health are *proper* goods.

(c) A thing chosen for itself affords satisfaction when achieved, and, under this aspect *as satisfying*, it is called a *bonum delectabile* or "a pleasurable good." Thus the enjoyment of health, or the pleasure one takes in a good dinner, indicates that health and pleasing food are *pleasurable* goods.

(d) A thing which truly answers an unspoiled natural tendency, or also a thing which answers a supernatural (i. e., grace-derived) tendency, is a *real* good. Thus, health, virtue, suitable work, are *real* goods. Contrasted with real good is *apparent* good, that is, a thing which has the outer seeming and the appeal of a real good, but which brings no lasting satisfaction. Thus indolence and sinful indulgence are not *real*, but *apparent* goods. It is a truth established in philosophical psychology that man cannot deliberately choose evil for its own sake or under the true aspect of evil; man can only choose evil when he views it as good. Nor is this sad choice a mere mistake; in responsible persons acting deliberately, it is always a perverse and blameworthy choice. Man, in every human action,—that is, in every deliberate thought, word, deed,—acts for *good*, real or apparent.

(e) A good which belongs to the order of man's outer, bodily life, is a *material* good. Such goods are man's health, his property, his standing in the community, his good name. A good which perfects man's

mind, is an *intellectual* good; such goods are, for example, knowledge, studiousness, tact or prudence. A good which perfects man's will, is a moral good; such, for instance, are justice, fortitude, purity.

(f) A good achievable by natural powers is a *natural* good; such a good is, for instance, acquired knowledge. A good achievable only by the aid of revelation or grace, is a *supernatural* good; such are the certitude of divine faith, confidence in God's providence, the divine virtues (faith, hope, charity). Further, a good achievable by a creature is a *finite* good. God alone is *infinite* Good.

c) EVIL

Evil is the absence of good, the lack of perfection, the privation of what ought to be present. Evil is accurately and simply defined as *the privation of good*.

We have distinguished goodness as *metaphysical*, *physical*, and *moral*. Academically, we may make a like classification of evil, the opposite of goodness. But, as we have seen, *being* and *goodness* are metaphysically identified, and so it appears that there is no such thing as metaphysical evil. Every being is good.

Now, on first sight it appears not only unlikely but downright untrue to say that every being is good. Is a wound or sore good? Is sickness good? Is sin good? The answer is that a wound or a sore or a sickness is *physically* bad, and that sin is *morally* bad. But we have no metaphysical badness or evil here. After all,

a wound or a sore or a sickness is not so much something positive as something negative; not so much the presence of something as the absence of something. Thus sickness is the absence of health; a wound or sore is the absence of physical soundness. These are not so much things as the absence of things. And so also with sin; it is the lack of conformity between man's conduct and the moral law; it is a failure, a falling away, a lack, an absence. These things which are physically or morally bad have no positive proper entity of their own which could be called evil; if they had, there could be metaphysical evil. But, as we see, they have not, for their essence lies in *a lack* and *an absence*, and not in the entitative presence of anything; they are rather to be called *non-being* than *being*, and hence their badness or evil is not to be ascribed to *being*, which is ever good.

Now, sickness and pain may appear very positive actualities to a man who must bear them, especially if they are due to physical causes that have positive, and even visible, presence, such as tumors or cancerous growths. It sounds a bit mad, at first hearing, to be told that a large and luxuriant collection of boils is rather the absence than the presence of something. Nor is it complete sense. The boils are indeed positive entities, but the damage that they do and the pain that they inflict is an interruption of normal function, an absence of healthy activities in the body. And only in so far are they evil. In themselves they may be very

good boils, and may delight the scientific soul of the surgeon who finds them perfect specimens of a certain type of infection; but whether they are good in this sense or not, they are good in so far as they have actual being. But how can they be good in the root-sense of desirable? They are not only desirable but desired; not, indeed, by the patient who feels them as pain and suffering, but by the body cells which helped to produce them in an effort to overcome what was interfering with normal processes. The germs which caused the first infection are *in themselves* good. In so far as they cause a disturbance, a lack of proper function, in the human body, they constitute a physical evil for that body, but, while they are bad for the body, they are not bad for themselves or in themselves. Being as such is good; any positive entity or being as such is good; and this is metaphysical goodness. Even the movement of the murderer's arm in striking down his victim is *good*; the same movement might readily be conceived as striking off the shackles of a slave, or as driving away a wild beast from innocent and helpless prey. The action is even *physically* good. But it is *morally* evil. And its evil consists in the fact that what is itself good is misdirected, misapplied, used in a manner out of line with (hence *lacking conformity* with) the law which should govern human conduct.

Metaphysical evil, then, is utterly impossible. But physical and moral evil are not only possible, but

manifest facts. *Physical evil* is any lack of elements, parts, functions, services, ends, purposes, that should be present in a *natural agent*, that is, in any duly constituted actual nature. *All* the perfections demanded by a rounded and complete nature must be present to render it worthy of the simple description *physically good*. Of course, a complex nature may have good features, and these may be considered as distinct natures in themselves, and so be discerned as good, whereas other features are not good. Thus a blind man may be in good health; all organs of his body may be functioning perfectly with the single exception of his eyes. But the point we make is that his nature as a whole is, by reason of his blindness, not perfect; it has a lack; it is *in so far* not good, but physically bad. Again we say, *Bonum ex integra causa; malum ex quocumque defectu*, that is, "A thing to be good must be wholly and completely good; it is rendered bad by (and to the extent of) any defect." Thus when we say that an ill-fitting coat is "no good," we do not say that the cloth is not of a pleasing weave, that it is not of suitable color, that it is not of fine workmanship; we mean merely that it does not fit. Thus a man may complain of bad health, and say, "I'm not well; my health is not good," even when only one organ (such as liver or stomach) is deranged. Of course, in an organism there is an interplay and sympathy of function which makes the man with a bad stomach or liver deficient in many other

functions; but the point we make is that the man's health is not good because *all* organs are not functioning properly and harmoniously. Again, a watch is "no good" if the mainspring be broken; all other parts are perfect, only one has broken down; yet the watch is thereby rendered a bad watch, a watch that is "no good." *Bonum ex integra causa*: a thing to be good must be entirely good.

Moral evil is sin. It is the lack of agreement between human activity and the norm or measure of what such activity ought to be. This norm is, as we have seen, fundamentally *the Eternal Law* (God, as Divine Reason and Will), and proximately *human conscience*, that is, human reason judging the present situation as in order or out of order, as lawful or unlawful. The Eternal Law is God's plan and programme for the proper conduct of human life as a purposive thing, a thing directed to a great End. Reason is man's mind inasmuch as it comes to grips with reality and studies it out; and one of the first signs that a man has reached the full use of his nature as man (a rational animal) is that he studies out and recognizes an order in things that he is required to observe and not to upset; in a measure, he recognizes the Divine plan, the Eternal Law. Man early becomes responsible; he "comes to the use of reason"; and, while he may disobey and disregard the obligations which reason makes manifest to him, he cannot deny the existence of such obligations. He cannot deny conscience. Thus we see that con-

science is not some mysterious inner urge, not "some still small voice," not "a little spark of celestial fire," but plain human reason, the same reason with which we work out a problem in mathematics, or with which we plan the family budget, or with which we scheme for a better job; only, to be called conscience, reason must deal with issues of right and wrong, lawful and unlawful, good and bad. Now, moral evil is a *lack* of conformity between human conduct or activity on the one hand and conscience on the other. Like all evil, it is the absence or lack of something, not the entitative presence of something. In the face of moral, as of physical, evil, we can and must still declare that being as such is ever good; for moral evil, like physical evil, is, in its essence, *non-being* rather than *being*.

What, now, is the cause of evil? Well, since evil is essentially a deficiency, a lack, an absence, a non-being in itself, it requires not a cause which produces it, but a cause which fails to supply the deficiency. It requires not so much an efficient (i. e., producing) cause as a deficient cause. But, in so far as positive reality is the cause of evil (by reason of its lack of power, or by reason of its moral perversity) we must assert that the cause of evil is good in itself. An engraver may have poor tools, or his skill may be defective, or he may be careless and hurried in his work, and for any or all of these reasons his work is not good; it is bad, no good, evil. Now, the engraver himself, his ability, his instruments, and his activity, are, as existing realities, actu-

ally good. That is, these things have being, and hence have metaphysical goodness. But *physically* these things present aspects of deficiency, and their product is therefore marked by deficiency of what it ought to be; it falls short, it is imperfect; it is, in so far, evil or "no good." The actual causes as realities have metaphysical or transcendental goodness; the actual product has actual metaphysical goodness. But the causes, and the product, are physically only "good as far as they go," and they do not go the whole distance; they fail; they are lacking. Hence there is *absent* from the product the rounded perfection that should be there, and this absence or lack is what we call physical evil or badness. We see that the true cause of this evil is the lack, the failure, the deficiency of what is, in itself, good. Thus understood, the statement is true that the cause of evil is good.

As to evil in the world about us, we find, as we have explained, both the physical and the moral type. Of physical evil, God is *the accidental cause*, not the *per se* or *direct* cause. The most manifest of physical evils are sickness, death, plagues, bad climate, waste lands, noxious plants, dangerous animals, natural forces in destructive play. Yet these things are not evil in themselves, nor are they evil for man; man grows to full stature only under pressure and hardship; he is all the better for the whips and scorns of time; he would inevitably fail of attaining his great End if the earth were still a paradise. As bitter medicine and painful

operations are sometimes required to restore health and soundness, so the so-called physical evils of existence are required by fallen man; rightly received, they drive out the deadly sickness of pride, they make man look to God, they help him achieve the purpose of his creation. Man, by the original sin, put "the times out of joint"; he upset the order of the world; he cannot, then, blame the consequent hardships upon God; and yet God allows the hardships to happen, and mercifully turns them to man's account, to his lasting good. In this (accidental) sense, God is the cause of physical evil in the world.

Of moral evil, God is in no sense the cause. Having made man free, he does not destroy the gift of freedom, even when it is abused. And sin or moral evil is always the abuse of freedom, of free-will. Yet even out of sin, of which man is the author and not God in any sense, the merciful Creator and Provider draws good. For out of the sin of persecutors came the glorious constancy of the martyrs. Out of the ills of civic or industrial oppression arises the opportunity for the exercise of the social virtues, the works of mercy.

SUMMARY OF THE ARTICLE

This Article has shown us the meaning of *goodness* and *the good*. We have seen herein how *being* and *the good* are really identified, and that they are distinguished only by a rational or logical distinction. We

have classified the good as *metaphysical* or *ontological*, *physical*, and *moral*. We have discussed the negative nature of evil, the opposite and the privation of good. We have seen that metaphysical evil is utterly impossible. We have discussed *physical* and *moral* evil. We have indicated the *cause* of evil.

CHAPTER II

THE MOST GENERAL PROPERTIES OF BEING

The *transcendental* properties of being are, as we have seen, unity, goodness, truth. These are attributes of being of every class, and are but aspects of being itself as such. In addition to these transcendental properties, there are properties of being that somehow fall short of the truly transcendental. These are two: *beauty* and *perfection*. We call these, not *transcendental*, but *most general* properties of being. Of these two properties we speak in the present Chapter, which is, accordingly, divided into two Articles:

Article 1. The Beauty of Being

Article 2. The Perfection of Being

ARTICLE I. THE BEAUTY OF BEING

- a) Meaning of Beauty
- b) Classification of Beauty
- c) Expression of Beauty

a) MEANING OF BEAUTY

The first note or mark about a *beautiful* thing is that it makes us think well of it, it pleases us, it appeals to us, it wins our approval. And the appeal of such a thing comes to us through the senses, chiefly that of sight, and, secondarily, that of hearing. But this appeal is not a matter of the senses alone. The

higher animals have sight, hearing, and the inner sense called imagination, and yet they give no manifestation of an appreciation of *the beautiful*, no evidence that they sense beauty at all. The senses are the channels of beauty *to an understanding mind*. Even in the appreciation of a landscape, or of a course of sweet sounds, eye and ear are powerless to account for the fact that the scene or the music is discerned as *beautiful*. The eye and ear are required, indeed, to perceive the objects here mentioned; they are required for the apprehending of this type of *the beautiful*; but they are not sufficient; back of the senses must be mind or intellect. Hence we are in error when we speak of *a sense of beauty*, or,—with a fine appreciation of Greek roots,—of *the aesthetic sense*, if we mean the term *sense* to be understood in its literal meaning as an organic faculty.

There is beauty in an ordered and well-directed life; there is beauty in the logic of an argument; there is beauty in the deep speculations of a thinker. These are types of moral and intellectual beauty, of beauty that belongs to will and to mind, and no *sense* is directly concerned with the appreciation of such beauty, for it is spiritual and supra-sensile. Yet the senses are required as avenues by which to come at such beauty; there must be visible evidence of the admirable life; there must be sensible expression of the logic and of the deep and valuable thoughts; else we cannot know of their existence. But no matter

how material, how much a matter of the senses, is the *manifestation* of beauty, the grasp of the *beautiful* is never a matter for the senses alone. It is the intellect which sees the beautiful, which apprehends it. Mr. Eric Gill, in his book *Beauty Looks After Herself*, says that truth is the object of the intellect, and goodness the object of the will, and beauty the object of the whole soul. Now, it is quite true that the object of the intellect is *the true* (or truth), and that the object of the will is *the good* (or goodness); but it is not true that "the whole soul" apprehends beauty. It is a truth established in philosophical psychology that the soul operates only through powers or "faculties" which are really distinct from the substance of the soul itself. Now, the soul has two fundamental faculties,—*intellect* and *will*. Each of these has diversities of operations, and they are often called by special names by reason of such operations, but they are never divided into really distinct sub-faculties, and there are no other soul-faculties which exist in the same order and line as themselves. Fundamentally, therefore, the apprehension and appreciation of beauty is a matter of intellect or of will or of both. In so far as the *apprehending* of the beautiful is rather a matter of *knowing* than of willing,—and surely it is formally such,—we must say that the intellect is the true *aesthetic faculty*. But the will has a part to play in the fruition or enjoyment or satisfaction which comes with the *appreciation* of the

beautiful, and deserves to be called an aesthetic faculty, at least in a secondary way. And the senses of sight and hearing, together with the imagination which preserves the findings of sense and reproduces them, constitute the sentient element of the aesthetic faculty. So we should not be far wrong if we summed up the whole matter by saying that the beautiful is apprehended by the intellect upon the action of the senses (sight, hearing, imagination), and into the full appreciation of the beautiful the will enters. Thus *the aesthetic faculty* is a collective name for sight, hearing, imagination, intellect, will; and among these five elements, the intellect undoubtedly holds the first place.

If the intellect is the chief element in the aesthetic faculty (i. e., the faculty for apprehending the beautiful) there must be a close connection between the beautiful and the true, for the object of the intellect, the thing which it is made to grasp, is truth. Still, the beautiful is not entirely synonymous with the true, for there are many truths which are not apprehended as beautiful. We have said that the first note or mark about a beautiful thing (after it is apprehended, of course) is that it *pleases* us, it is the occasion of *satisfaction*, and this brings the beautiful into the domain of *the good*, which is the object of the will.

The beautiful pleases us. Whether it is seen (i. e., apprehended) by the bodily eyes of an intelligent be-

holder, or by the mind alone, it is that "which pleases the beholder." This description of the beautiful must not mislead us into thinking that the whole essence of the beautiful lies in the pleasure which it gives, the emotion which it evokes, the approval and joyous contemplation of the one who experiences it. For it is not entirely true that 'beauty is in the eye of the beholder.' There is an objective, a trans-subjective, foundation for the beautiful. The subjective element or factor (i. e., the element furnished by the beholder) is a strong and important one in the apprehending and appreciation of the beautiful, but it is not the only one. It is true, indeed, that the same object may appeal to one beholder as beautiful, to a second as lacking beauty, to a third as positively repulsive and ugly. Think, for instance, of the variety of opinions about the beauty of a "modernistic" painting (say a piece of surrealism), or about the beauty of a Beuronese statue, or the beauty of Strawinski's music or of Sandburg's verse. Thus it is manifest that the subjective factor, the individual "taste" of the "beholder," is a matter of wide variety. Tastes differ, and there is no disputing about tastes, partly, as G. K. Chesterton points out, because some tastes are beyond dispute. But wide as the field of tastes may be, it is not all-inclusive and all-sufficient when the beautiful is in question. There are objective (or trans-subjective) factors which enter into the very concept of the beautiful. To list these is not

easy, yet it must be attempted. Here we propose no new or fantastic theory, but submit, in our own way, the traditional doctrine.

First, a beautiful thing has about it a natural completeness or *integrity*. Broken arches or ruined towers may be beautiful, but it is not because of their incompleteness that they are so; if it were, any half-built house would be beautiful, which is manifestly not the case. The arches and towers are beautiful because time and natural processes have softened their rugged outlines, and made them fit into a larger picture of a whole landscape; and because they stir the pleasing vague memory of a dimly-suggested past. A twisted hand is not beautiful, nor is a withered branch of a tree; yet either of these may be telling details in a larger picture which is truly pleasing. Therefore, when incompleteness or lack of soundness is found in a beautiful object, its presence does not constitute beauty, but may help (by contrast or suggestion) to manifest the beauty of the whole object,—and the *wholeness* of the object is a requisite for its claim to be something beautiful. But completeness or integrity does not mean maturity. There is beauty in a rosebud, and in a little child, quite apart from the implied forecast or promise of what is to come. The rosebud and the child have each a complete nature, even if it be an immature nature.

In addition to completeness or integrity, a beautiful thing must have about it a certain opulence or

richness which is powerful in its influence upon the beholder. In a word, it must have a kind of *fulness*, *fineness*, and *effectiveness*. Sometimes this fulness is described as *largeness*, but the term may be misleading. For, while there is undoubted beauty in far distances, in the wide sweep of sea or plain, or in the noble dimensions of a mountain range, it is not *physical largeness* that constitutes the effectiveness of every beautiful object. Some beautiful things are quite small. There is beauty in the tiny gem; there is beauty in the crystal, though it requires a microscope to render it visible. Physical bigness is an element of beauty in some things, but not in all. But the fulness and effectiveness of which we speak here is rather a kind of richness; a rounded nature richly graced. These things are not easy to set down in human speech; no terms are adequate to express what is in itself never completely expressible; but it seems that the terms *fulness* and *richness* are more justly suggestive of the second objective requirement for the beautiful, than the term *largeness*.

The third objective (or trans-subjective) element of the beautiful is *variety*. A beautiful thing presents to view a certain pleasing complexity of elements or parts, of viewpoints or aspects. There is no beauty in a single sustained tone, unrelated to other tones. There is no beauty in a single curved line which is not a part of any picture. Even that which is perfectly simple is not apprehended as beautiful by man's

mind until it has been intellectually grasped as presenting a variety of logical distinctions. God is perfectly simple, uncomposed, undivided. Yet in God there is the real variety of the Holy Trinity of Persons, and in the undivided Divine Essence the student and the devout worshipper find phase after phase of surpassing beauty; and throughout eternity, our faith assures us, the blessed in heaven will behold God as an endless revelation of unspeakable beauty, the Ever Ancient, Ever New. We repeat: for a thing to be beautiful it must have parts, or present aspects that are various. The beautiful gem, though a single stone, presents a number of facets, each shattering the light into a variety of colors and blended tints.

A fourth objective (or trans-subjective) element or factor of the beautiful is *unity* or *harmony*. For variety alone is not beautiful; only that variety is beautiful which is set in order, which is harmonious and unified. A room of fine proportions, with all the furniture needed to make it a beautiful place, is not beautiful if the furniture is heaped together in the middle of the floor or scattered about at haphazard. Order, balance, unity, harmony,—these enter into the objective structure of a beautiful thing.

A fifth and final trans-subjective element of the beautiful is the result or product of the first four, and, indeed, may be considered not so much an *element* of the beautiful as a synonym for beauty itself. This is a certain *clarity*, *splendor*, *refulgence*, *lightsomeness*,

or *glory*, which emerges from that which is integrally complete in the fulness of rich and gracious being, and which presents to view a pleasing variety unified in proportionate and balanced harmonies.

These five factors, then, enter into the objective or trans-subjective structure of a beautiful thing. No matter how tastes may vary,—and they vary widely and even wildly,—that which appeals to any taste as *beautiful* has about it some real or apparent completeness, fineness, variety, harmony, and splendor.

We come now to the formulation of a definition of *beauty* or *the beautiful*. We may put it thus: *Beauty is an attribute or property of that being which, in its parts, elements, aspects, or activities, manifests, in a manner pleasing to the mind and satisfactory to the will and the emotions, a striking resplendence of completeness and harmony, of proportion and balance.* This definition is cumbrous, indeed, but it appears to cover the ground and to meet at all points the requirements of the essence defined. It takes account of the subjective element or factor in the apprehending and appreciation of the beautiful (as is evident in the terms *pleasing, satisfactory, striking*) as well as the objective or trans-subjective factors in the beautiful thing. For it indicates *completeness* and *harmony* by name, and suggests *variety* (“*in parts, elements, aspects, activities*”); *richness* and *effectiveness* are suggested in the term *striking*;

and *clarity* or *splendor* are indicated in the term *resplendence*.

There are current many famous definitions of beauty, many of them brief and pointed in expression, but, for the most part, these definitions justify the ancient saying, "Trying to be brief, I become obscure." Such are the following: "Beauty is the splendor of truth"; "Beauty is the splendor of being"; "Beauty is the splendor of order"; "Beauty is the splendor of perfection." Andre and Cousin define beauty as "Unity amid variety," but the definition is not acceptable for it leaves out entirely the subjective factor, the appeal to the mind, the pleasure and satisfaction which comes to the beholder. Kant says that beauty is the power of a thing to stir imagination without upsetting the understanding; but this definition is inadequate on both the subjective and the objective side, and its terms are too vague to convey an accurate meaning. Keats declares:

Beauty is truth, truth beauty; that is all

You know on earth, and all you need to know.

But the statement is not true. For while the beautiful is necessarily true with the truth of all being, it is quite easy to instance cases of truth that is not beautiful. The concept of *being as such* is a true and objective concept, but *being as such* is too simple and abstract to admit the trans-subjective factors of the

beautiful. It may be said that Keats did not mean to make beauty identical with transcendental truth, but with logical truth. But there are many items of knowledge (logical truth) that are not beautiful. To know that there are 26 letters in the English alphabet, or that a railway accident occurred yesterday, or that prices of commodities are steadily rising, does not suggest beauty to the mind; such knowledge is surely not to be identified with beauty. To identify beauty with transcendental truth is to widen the concept of beauty to an extent that destroys it; to identify beauty with logical truth is to narrow its limits destructively. For fiction is not an expression of logical truth, but of the figures and fancies of the imagination under the light of the mind and the direction of the will; and yet fiction is often beautiful. Therefore, truth and beauty are not to be identified. The beautiful is true, inasmuch as it is being, but it does not follow that the true is necessarily beautiful.

b) CLASSIFICATION OF BEAUTY

1. Beauty is *ideal* and *real*. Ideal beauty is a kind of standard in the mind, according to which known objects and activities are measured in judging whether they merit the description of "beautiful." The perfect ideal beauty, free from every possible mistaken whim or prejudice, is to be found only in the Perfect Mind, that is, in God. Yet there is an

ideal of the beautiful in every normal and experienced human mind, limited and imperfect as such a mind ever is. Thus we distinguish two types of ideal beauty, *the divine* and *the human*.—*Real* beauty is the objective or trans-subjective beauty of things knowable. It is the beauty of an object that has integrity or completeness, richness of being, variety, unity, splendence.

2. That which has real beauty has either *material* or *spiritual* beauty. Material beauty is that which makes a direct appeal through the senses; it is sensible beauty. Of course, we have already learned that beauty is never entirely material or sensible, since it involves the mind, and, to an extent, also the will. It is accurate to say that material beauty is that which is discerned in sensible objects. Such is the beauty of face or form, of a flower, of a painting, of a piece of needlework, of the starry heavens.—Spiritual beauty appeals to the understanding and the noble will. Thus we find spiritual beauty in a beautiful life (though it be lived in rags and in squalid surroundings), in virtue, in an innocent mind, in a sweet and trusting disposition, in high ideals, in grace, in devotion, in the true religion, in self-sacrifice, in resignation.

3. Real beauty, whether spiritual or material, may be manifested in varying degrees. Thus, on the score of effectiveness in the beautiful object, we distinguish that beauty which gently moves the beholder

to a certain tenderness of appreciation, that which moves him more strongly, and that which overpowers him and renders him incapable of a just expression of his appreciation. The first of these three types or degrees of beauty may be called *loveliness, charm, graciousness*. The second is simply *the beautiful or beauty*. The third is the *sublime or sublimity*. The beauty of a face, of manner, of conduct, is of the first type. Most beautiful objects belong to the widely inclusive field of the second type, the simply *beautiful*. The beauty of God, or, in the material order, the beauty of the mighty ocean in a wild tempest, is of the third type, *the sublime*.

c) EXPRESSION OF BEAUTY

The beautiful, in so far as it is capable of *material expression* by the skill and effort of human beings, who have nobly conceived it in mind and adequately imaged it in fancy, is the object of what we call *the fine arts*. The term *art*, taken simply, may be defined subjectively and objectively. Subjectively considered (that is, considered from the standpoint of the subject, the person, the artist or artisan), *art* is a suitable conception, a right idea of how things should be done to produce a useful or a beautiful result (*recta ratio fabricilium*). Objectively, *art* is the process of producing useful or beautiful things, or it is the fruit of that process, that is, it is the collection or sum-total of beautiful or useful things produced.

An art which aims at the production of *useful* things of bodily character, is a *mechanical art*. Such, for example, are the arts of weaving, of dressmaking, of practical carpentry. An art which aims at the production of beauty in a fuller knowledge and a nobler life, is a *liberal art*. An art which aims at the production of beautiful objects in the material order is a *fine art*. A programme of valuable studies which serve to enlighten the mind and enrich culture is a list of *liberal arts*, and it is of such *arts* that we turn out Bachelors and Masters at every college commencement. Among the *fine arts* we list architecture, sculpture, painting, poetry, and music. It is manifest that many of the arts are of mingled character; dressmaking, for instance, is itself a *mechanical art*, yet the dressmaker certainly aims at producing something that is beautiful as well as useful, and in so far, her art is a *fine art*. A competent workman who exercises any of the mechanical arts is called *an artisan*. A follower of the liberal arts is usually called a student, a philosopher, a theologian, a theoretical scientist, a scholar, etc. Only the follower of one of the fine arts is called *an artist*, and, in current colloquial speech, the name *artist* suggests one devoted to the art of painting; sometimes the term is extended to include the sculptor and the musician; seldom is it applied to the architect or the poet.

Our listing of *arts* is suggestive, not exhaustive. We might mention the *political arts* (lawmaking,

government, polity), the *professional* arts (teaching, administration, etc.), the *household* arts (management, cookery, decoration, budgeting, etc.), and many other items of an almost endless litany. Nor have we given a full list of even the fine arts; we have, for example, made no mention of the *dramatic* art, the *elocutionary* art, and so on. But the three varieties mentioned (mechanical arts, liberal arts, fine arts) are the *major classifications* of art; most individual arts are readily grouped, each in its logical place, under these three headings.

A product of a mechanical art is called an artificial thing; a product of a fine art is called an artistic thing. It is manifest that a thing may be artificial and also artistic (for as we have seen the mechanical and the fine arts have points at which they overlap). It is equally evident that every artistic product, inasmuch as it is the fruit of applied human effort and skill, is *artificial*, that is *arte factum*, "a thing made by art." Beautiful objects of the material order are classed as *beauties of nature* and *beauties of art*, or as *natural* and *artificial* beauties.

What is the relation of art to morality? Can a painting, for instance, be really artistic (hence *beautiful*, for the beautiful is the aim and end of the fine arts) if it depicts a scene offensive to Christian modesty? May the artist ignore the laws of morality; may he consider himself freed by his art from the requirements which bind upon ordinary men? Is it

true to say that art is its own justification, and that the moral law must not be allowed to interfere with the full expression of what is beautiful in itself? Is it right to say, "Art for art's sake"? Mr. G. K. Chesterton once said that, after viewing some of the work done by the proponents of "Art for art's sake," he felt strongly impelled to shout, "No art, for God's sake!" But the questions propounded demand a serious answer. We shall set forth that answer in a series of three points:

1. It is a fundamental truth to be recognized by artist and critic that there can be no conflicting varieties of beauty. Grades or degrees of beauty, yes; but one sort of beauty conflicting with another, contradicting it, blocking it out, absolutely no. Now, morality is a sublimely beautiful thing in itself, and, in special, the virtue of modesty is wondrously beautiful. Therefore, what comes in conflict with this beauty cannot be itself beautiful. Art which conflicts with the moral law is not art in any true sense of the term. We do not mean to say that art and morality are identified, but we do mean to say that they are definitely related and are not in wholly independent fields. And since morality aims at the good, and ultimately at the *summum bonum* or supreme good which is the driving force behind every human activity and the goal towards which every human existence is impelled, it has the supreme place in human life, and no human work can be divorced from its in-

fluence or free from its relationship. Therefore art cannot be either *immoral* (that is, in conflict with morality) or *unmoral* (that is, a thing wholly unrelated to morality).

2. It is the function of philosophical ethics to prove that man, in all his truly human (that is, *knowing, deliberate, and free*) activities, tends towards happiness in the possession of the *summum bonum*. In other words, the attainment of complete and endless happiness is the business of life, and towards the proper and full discharge of this business every feature, factor, and function of life must tend; for the primary obligation of any existence is to attain its end and purpose. Now, the moral law is the code of rules, the essential directions, for conducting the business of life as it should be conducted. Hence nothing must be allowed to conflict with this law, and everything must aid, according to its character and measure, in the fulfilling of this law. Therefore, art, far from being a thing indifferent or opposed to the moral law, must be its positive aid and support. Art must not be *immoral*; it must not be *unmoral* or *amoral* (to use a term in fashion); it must be positively *moral*. That is to say, art must be a worthy human expression of the beautiful in terms that will not debase a man, but inspire him, lift up his heart and will and fancy, evoke noble emotions, and so further man in the attainment of the destiny for which he is put on the earth.

3. One cannot justly say, "Science ignores morality; why does not art have the same privilege?" First of all, science is a thing of the mind; it is concerned with knowledge. Art is not concerned with mind alone, but with will, and with powerful emotions which sway the will. Science seeks *to know*, but invites no approval upon its findings. To know evil is not to approve evil. Indeed, to know evil is necessary, even to avoid evil. Scientific knowledge (not pseudo-scientific theories) even of evil things is thus of direct service to man in the attaining of his final goal. It is not true, therefore, to say that science is wholly independent of morality. And even if it were true, art could not claim parity with science on the point, for art is expressed in objects that are meant *to invite approval*, to excite pleasure, to win the will to delight or at least to complacency.

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of *beauty* and *the beautiful*. We have found that the *subjective* factors in the apprehending and appreciation of the beautiful are not the only ones to be considered; certain objective or trans-subjective factors exist, and these are perfections in the beautiful object itself, viz., *completeness* or *integrity*; *fulness* or *opulence* of being which gives *effectiveness*; *unity* of parts or aspects; *harmony* or *balance* of elements;

and *resplendence*. We have classified beauty as *real* and *ideal*; *spiritual* and *material*; and have discerned certain degrees of beauty which make an object *simply beautiful*, *graceful* or *charming* or *lovely*, or *sublime*. We have considered the expression of the beautiful in *the fine arts*. We have discussed the mistaken principle of "Art for art's sake," and have seen wherein it is fallacious.

ARTICLE 2. THE PERFECTION OF BEING

- a) Meaning of Perfection
- b) Classification of Perfections
- c) Phases of Perfection

a) MEANING OF PERFECTION

We have seen that a being is necessarily good with transcendental goodness. Actual being (that is, existent being) has actual goodness; potential being (that is, possible being) has potential goodness. Were we to try to express the goodness of being in terms of measurement and value, we should say that the goodness of actual being is *major* goodness, and that of potential being is *minor* goodness. Now, major goodness, or the goodness of actuality, is manifestly present according to the measure of actuality or existence. The more a thing is actual, the more it exists in its fulness and completeness, the more *good* it is in itself. And when a thing is actually all that it should be, when it exists as something thoroughly complete, when it is "made or done through and

through," when it is "all there," we say that it is *perfect* or that it has *perfection*.

The terms *perfect* and *perfection* are from the Latin *per* "through," and *factum* "made." Thus the words suggest something *made thoroughly* or *thoroughly*, completed, finished, rounded out, no element lacking. So we define a *perfect thing* as *an actuality which is lacking in none of the requirements for its complete and rounded nature*. And we define *perfection* as *the fulness of being required by the rounded nature of an existing reality*.

b) CLASSIFICATION OF PERFECTIONS

I. Absolute—Relative. *Absolute* perfection (term derived from the Latin *absolutum* "freed from" or "loosed from" limitations) is the unhampered and unlimited fulness of being in every respect. Manifestly such perfection belongs only to Infinite Being, that is, to God alone. The term *absolute perfection* is, in a way, a self-contradictory expression; for *perfection* suggests, as we have seen, something *made*, something *actualized*, something *thoroughly completed*. Of course, God is not made, nor actualized, nor completed; He is Pure Actuality; He is Necessary Being. Therefore, while we may surely follow long usage in employing the expression *absolute perfection* and in applying it to God, we must notice the limitations of the term itself, and clearly exclude these from the concept which we express by it.—

Relative perfection (that is, perfection viewed *in relation to* special natures) is the fulness of being required for the rounded completeness of any existing creature.

2. *Entire—Partial*. A relative perfection is *entire* when it embraces the whole nature of the object of which it is predicated. Thus, using the term *perfect* in an entire sense, "a perfect man" is a man who is physically, mentally, and morally all that he should be.—A relative perfection is *partial* when it is predicable, not of a whole nature, but of some element or elements of a nature. Thus, using the term *perfect* in a partial sense, "a perfect man" may mean a man who is physically perfect. Thus again, "perfect eyesight" indicates a partial perfection.

3. *Pure—Mixed*. A perfection is *pure* or *unmixed* when it involves no concomitant or admixed imperfection. Life is a pure perfection; so is knowledge. The scholastic term for a pure perfection is *perfectio simpliciter simplex*, that is, "a perfection taken simply," "a perfection without qualification."—A perfection is *mixed* or *non-pure* when it involves imperfection. Thus the power to walk is a perfection, but it involves inability to move from place to place without slow and laborious steps. That I am able to walk is a perfection; that I *must* walk to reach a desired destination and cannot be there at once without walking, is an imperfection. Again: that I can reason, that I can work out a problem and find the

answer, is a perfection; but it is an imperfection in me that I cannot clearly see the answer at once without having to work it out. Thus walking and reasoning are mixed perfections. The scholastic name for a mixed perfection is *perfectio secundum quid*, that is, "a perfection of sorts," "a perfection after a fashion," "a perfection from a certain viewpoint."

4. *Formally present—Virtually present—Eminently present.* A perfection is present in its subject (that is, in the being that possesses it) *formally* when it is there according to its literal definition and in literal fact. Thus the perfection of reasoning, of being able to study out a problem or "think out" a situation, is formally present in a normal human adult. But this perfection is not formally present in an angel, for the angelic intellect knows all that it can know directly and clearly without having the need to unravel complexities or study things out. The angelic mind has the result, the fruit, the value or the *virtue* (that is, the force, power, effectiveness) of reasoning without the effort of reasoning; it has the virtue of the process without having to go through the process. Therefore we say that the perfection of reasoning is present in an angel, not *formally*, but *virtually*. Let us illustrate these contrasted modes in which a perfection may be present in its subject, by considering another example. The life-principle (or soul) of a plant is *formally* vegetal, that is, it is the principle which directly and literally

renders the plant a living thing of the vegetable order, and endows it with the operations of nourishing itself, growing, and propagating. Now, the spiritual soul of a man is not formally vegetal, but formally rational, for it is in its nature above the plane of things material and hence above the plane of material operations such as those that belong to the vegetal order. Still, the spiritual soul of a man is his only soul; it is his only life-principle; it is the only substantial source of all the vital operations exercised in and by a man. And a man has vegetal operations; he has plant-life; he is nourished, he grows, he reproduces his kind. Therefore the one soul in man is the source of his vegetal operations, even though it be not *formally* vegetal itself; though it be a superior life-principle, it has all the force, power, excellence, and effectiveness (that is, the *virtue*) of lower life-forms or life-principles. Hence we say that man's soul is *formally* rational, but *virtually* vegetal. So also, man's soul (which is *formally* rational) is *virtually* sentient, for it is the root-source in man of the animal-operations of sensing, appetizing, and moving locally. So also the life-principle of an animal is formally sentient, and virtually vegetal.—A perfection is said to be present in its subject *eminently* when it is there (formally or virtually) in a manner superior to that which marks its presence in limited natures. Thus we say that the perfection called life

is present in a man formally; so also the perfection called reasoning is present in a man formally. But we say that life is present in God *formally and eminently*, and that reasoning is present in God *virtually and eminently*. The term *eminently* or the term *eminent perfection* is used only with reference to Infinite Perfection, that is, to God. Of course, it is an inadequate expression, for, as we have seen, God does not really *have* perfections; all that God *has*, He *is*, all the attributes or perfections of God are identified in the undivided Divine Essence.

c) PHASES OF PERFECTION

The *absolutely* perfect Being is without lack or flaw or limitation, no matter what our point of view in studying it. It suffers no defects; it is subjected to no limits or boundaries, such as are imposed on less perfect beings by space, time, quantity, dependency, change. We say, therefore, that the absolutely perfect Being, viewed under distinct aspects or seen in logically distinct phases, is *infinite, eternal, necessary, uncompounded (simple), unalterable*. But creaturely things are not absolutely perfect but only *relatively* so. Contrasting them with Absolute Perfection, we notice their deficiencies (or, more accurately, the fact that their perfections are *mixed* perfections) and we find that they are *finite, temporal, contingent, compounded, changeable*. This contrasting of the

Absolute Perfection and the relative perfections of creatures gives us the following series of views or phases of perfection.

1. *The Finite and the Infinite.* A *finite* being has boundaries or limits or limitations. It is called *finite* from the Latin *finis* "end"; and the term "end" here means "boundary," "finishing-line," "point of breaking off." A finite being is capable of measurement of one kind or another, and such measurement is expressible in terms of quantity (literally or by analogy), or in terms of *limited* power, capacity, or activity. All creatures are finite.—The *Infinite* Being is (as the term *in-finite* or *non-finite* indicates) a Being with no boundaries or limitations whatever. It is the fulness of being; it is measureless perfection in every direction and in boundless degree. It is not only a Perfection which actually exists or *has* actuality; It is Pure Actuality Itself, so that there is nothing conceivable which It might still achieve in growth, existence, or activity; nothing conceivable that might be lost or left behind; no advance or retrogression; no maturing or aging; no change or alteration. That there exists one, and only one, Infinite Being, whom we call God, is proved in the philosophical science of Theodicy or Natural Theology. Our knowledge of Infinity is not built up in us by piling, so to speak, finite idea on finite idea. We derive our idea of the Infinite from finite concepts simply by dropping the notion of limits and

boundaries which such concepts connote.—A thing which has no *determined* limits is properly called *indefinite*, although it is often called *potentially infinite*. But it is never actually infinite. The One Actual Infinity is, as we have said, boundless in all directions or under all points of view. The *potentially infinite* offers an unbounded (but not determinately boundless) view in a single direction only. Thus a number is called indefinite or *potentially infinite* (in the direction of abstract quantity) in so far as there is no determined limit to the possibility of adding to it, multiplying it, dividing it. You may, for instance, multiply ten by ten, and this result by ten, and so on *indefinitely*; there is no determinate point at which the process must stop; there is no point at which further multiplication by ten becomes impossible to conceive. Or you may divide the number ten by three, using the decimal system, and you may go on writing threes in your answer forever; there is no point at which you must put down the final three, no further item of the quotient being conceivable. But at any given moment, at any *actual* stage in the process of multiplying or dividing, the result is *finite*.

2. *The Temporal and the Eternal.* A *temporal* being is subject to the measurement of time. The term temporal comes from the Latin *tempus* (stem, *tempor*—) which means “time.” A temporal being has a beginning, and it endures through a succession of moments or intervals of time. Of the nature of time

itself, we shall speak in another place (*Cf. Book Third, Chap. I, Art 3, c*).—*Eternal* Being is wholly outside time, having neither beginning, successive duration, nor ending. Only the Infinite Being is eternal in this complete sense. A qualified *eternity* (called by the Latin name *aevum* or *aeviternitas*) is ascribed to those beings which have a beginning but which will not have an end of their existence; such a qualified eternity may be called *immortality* or *deathlessness*; it belongs to angels and to human souls.

3. *The Contingent and the Necessary.* A *contingent* being is a being which involves in itself no necessity for existence, but is dependent upon, or contingent upon, the operation of causes sufficient to produce it. A contingent being is a *caused* being; it is an *effect*; it requires a cause to *bring* it into existence and to *keep* or maintain it in existence; it is never self-sufficient. All finite beings, all creatures, are contingent beings.—*Necessary* Being is that which must exist and cannot be non-existent; it is a Being of boundless perfection, the very nature of which includes the perfection called existence; it is identified with boundless existence; it is Pure Actuality.—A *hypothetical necessity* attaches to a result which necessarily comes from the fulfillment of a condition. Thus, *if* a cause operates to produce an effect, the effect is there, and cannot be denied; it is there *necessarily*. All existing creatures are *hypo-*

thetically necessary; that is, since they are here, they are necessarily here, and there's no denying the fact; it is *necessary* to acknowledge the existence of what truly exists. Hence, though creatures are, in themselves, *contingent* beings, existing or actual creatures are *necessary by the necessity of fact*.—It is manifest to the thinking mind that the existence of contingent beings is proof positive of the existence of an Infinite and Uncaused Necessary Being, which is the First Cause of every contingent existence.

4. *The Compounded and the Uncompounded.* A *compound, compounded, or composed* being is one that is made of elements or parts. If the elements are *real*, that is, if they are things in nature outside the mind, the compounding or composition is called *real composition*. In the union of body and soul in a man, in the union of hydrogen and oxygen in water, in the union of grains of sugar to make up a pound, we have examples of real composition. The first two examples illustrate *essential* and *substantial* real composition; the third example illustrates *accidental* real composition. Essential real composition normally brings with it, at least in the more complex bodily substances, a train of things which are non-essential but which are needed for the rounded completeness and full operation of *the composite*, that is, the compounded being. Thus the essential elements of a human being are body and soul. But there are many bodily parts without which a human being can exist

and function, even if this be in a hampered way; hence these parts are not strictly essential. Still, they are needed for the complete perfection of a man. A man can live without fingers, toes, arms hands, legs, teeth, hair. These are not, therefore, *essential* parts of a man, since his essence can exist without them. But they are *integral* parts of a man, or, more precisely, integral parts of a man's body, for they belong to the *integrity* (that is, to the completeness, the "undefective condition") of the body; their loss means a certain damage, a certain hampering, a certain lack in the perfection or the operations of the body. Inasmuch as a substance is a real composite, we may view it as a union of parts that are essential, substantial, integral, accidental.—When the elements of a being are not real entities in nature, but logical entities in the mind (views, phases, aspects), we call the compounded being a *logical composite*, or say that it is constituted by *logical composition*. Thus when we say that a proposition is made up of subject, verb, and object, we indicate logical parts of the proposition, and we declare the proposition itself the product of logical composition; it is a logical composite. If the logical composite is a union of ideas or concepts which constitute *the understood essence* of a thing, we call the composite *metaphysical*. Thus, the idea or concept of *man* is composed of six distinct constituent concepts or ideas (*being, subsistent being, bodily being, living being, sentient being, rational being*). The

idea man as an entity in the mind is a *logical composite*, and its component elements or logical parts are the six ideas named. But the *idea man* as the *essence of man understood by the mind*, or re-present in the mind, is a *metaphysical composite* and its elements or metaphysical parts are the six essences represented by the six ideas named. The ideas named, considered in their objects, that is, considered as the essences which they represent, are not mere logical phases of man's essence; they are points of *known reality* which together represent in mind the *whole reality* called *man*. They are not physical parts of man as he exists in nature; they are not purely logical parts or aspects of a mental point of view; they are parts which are *representatively real*; we call such parts by the name *metaphysical*. As explained elsewhere, these metaphysical parts are also *metaphysical grades*, since, in their series, each presupposes the foregoing, like steps in a stairway.—Contrasted with compound being (a composite) we find *uncompounded* or *simple* being. A being is simple when it is not made up of parts. Thus the human soul is a simple being. It is not *absolutely* simple, that is, simple from every point of view, but, like all finite beings, it is *relatively* simple; it is simple *in relation to* or *relatively* to its mode of physical being. The soul has no proper physical *parts*; but the soul is composed of actuality and potentiality, essence and existence, nature and faculties. Only the Infinite Being is absolutely sim-

ple; all creatures, from highest to lowest, are either *compounded* or they are only *relatively simple*. The Infinite Being must be absolutely simple, because it is absolutely perfect, and composition is always an imperfection and a limitation. Composition indicates the contingency of a being, for a composite is dependent on the union of its elements or parts; it involves potentiality, since it is itself an actualization brought about by the uniting of its elements or parts. But the Infinite Being is Necessary Being; It is Pure Actuality. Hence the Infinite Being is absolutely simple. In the Infinite Being, therefore, essence and existence, substance and powers, nature and faculties, are all one and the same undivided essence.

5. *The Changeable and the Changeless.* A *changeable* being, as the name indicates, is one that can pass from one state of being to another; it is *mutable* being. Now, mutation or change may be *intrinsic*, that is, it may occur right in the thing changed (as in water that is changed from cold to hot, or in food that is changed to flesh and blood); or it may be *extrinsic*, that is, it may be a change of aspect, angle, or external circumstance of that which remains in itself (intrinsically) unchanged (as a tree by the roadside along which I walk is first in front of me, then abreast of me, then behind me). Extrinsic change is not really change *in the object* to which it is referred, but *in its standing or relation* to something else. Intrinsic change is *substantial* or *accidental*

(*Cf. Book First, Chap. II, Art. 2, d*).—A changeless being is one that is in no wise subjected to intrinsic mutation or change. Manifestly, only the Infinite Being is changeless. This changelessness in God must not be conceived of as a kind of frozen fixity, for that would be a hampering thing, a limitation; and God is not subject to any limitation at all. Change in a finite being, a creature, is a necessary consequent of its imperfect state; even to develop and to achieve its full relative perfections, a creature must pass from stage to stage, gaining the newest one only by relinquishing the last. But God has all perfections in boundless measure *all at once* and *eternally*; more properly, all perfections in boundless degree are identified with the eternal Divine Essence. Hence, truly, there is with God, “no change nor shadow of alteration.”

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of *perfection* and of a *perfect being*. We have classified perfections as *absolute* and *relative*; as *entire* and *partial*; as *pure* (*perfectio simpliciter simplex*) and *mixed* (*perfectio secundum quid*). We have learned that perfections are predicable of their subject either *formally* or *virtually*, and have seen that in the Infinite Being perfections are present, whether formally or virtually, in an *eminent* degree. We have studied

phases or aspects of perfection, viewing it in the Infinite Being as *infinite, eternal, necessary, simple, changeless* (and have seen that such perfection is really identified with the Divine Essence itself), and in creatures as *finite, temporal, contingent, compounded, mutable*.

BOOK THIRD

CLASSIFICATION OF BEING

This Book studies the most general classifications of real finite being, namely *substance* and *accident*. The classification called *accident* is ninefold, and the nine accidents together with substance constitute *the ten categories* or *the ten predicamentals*. The categories are not ten kinds of being, but *real modes* in which created being may exist; they are the supreme *genera* of being, or the supreme *classes* of real and finite being. The present Book studies these genera or classes, and then takes up the closely related subject of the *causes* of being. The Book has, therefore, two Chapters, as follows:

Chapter I. The Supreme Classes of Being

Chapter II. Beings in Their Causes

CHAPTER I

THE SUPREME CLASSES OF BEING

This Chapter studies the most general classifications, the supreme genera, of real and finite being. We do not here discuss *logical being*, nor do we directly discuss that Infinite and Necessary Being which is boundlessly more perfect than the most perfect finite substance, and which is not subject to the qualifying limitations of the accidents. We study *real* and *finite* being. The supreme classification of real finite being marks it off into *ten categories*, or *predicamentals*, or *predicaments*, which we call "substance and the nine accidents." These are the ultimate classifications of reality in so far as it falls within the immediate experience of a human being, that is, of finite reality, whether spiritual or material, whether existing or existible, whether existible *in itself* or existible as the mark, mode, qualification, or characteristic of something other than itself. In a word, we have in the categories *modes of real being* that are intelligible to the human mind. These are not modes of mind, or modes of thought, or modes of predication (such modes, as we have seen, are the *Predicables*). They are modes of *real being*, and yet these modes bear a relation to the mind and constitute man's catalogue, or his series of real pigeonholes, in which he files his experiences of reality. The Chapter is divided into three Articles, as follows:

Article 1. The Categories in General

Article 2. Substance

Article 3. Certain Accidents

ARTICLE I. THE CATEGORIES IN GENERAL

- a) Need of Categories
- b) Basis of Categories
- c) Aristotle's Categories

a) NEED OF CATEGORIES

The philosopher is a man who tries to penetrate as deeply as can be done into the nature of things. He seeks knowledge that is more than surface knowledge; he seeks knowledge that is root-deep, and indeed he seeks the very last and deepest roots. He wants the answer to *ultimate* hows, whys, wherefores. And he seeks to draw this knowledge from every available source, and to bring it into order and unity in his mind. Therefore, his is no random quest, no dilettante skipping here and there, no vagrant journey. Manifestly, if his search is to be fruitful, if it is to realize its most serious aim, the philosopher must have a clear-cut and objectively true map and plan. Of course, there must have been, in ages past, pioneers who had first to investigate before making up the map. But maps are checked and rechecked as time goes by, and presently they are known to be adequate and reliable. We do not take a map on faith alone, but because it checks with experience, because it indicates the way of a complete and rounded journey, and because it works out as a satisfactory guide. Now, something of the service

of the true map to the traveller, is rendered to the philosopher by the categories.

All things come together in the concept of *being* or *thing*. But there must be some classes of real being, immediately discernible within the all-inclusive classification of *being itself*, which will enable the philosopher to begin his work, to get started on his journey with some promise of success. And these classes of real being must square with fact. It will not do to sit down and plan what we shall choose to regard as the ultimate classifications of real finite being. Hegel (1770-1831) made this mistake; he tried to analyze the concept or idea of *being* to learn the ultimate classifications of reality. One might as well try to map a territory by analyzing the abstract concepts of distance and direction. Manifestly, the classifications of reality, whether proximate or ultimate, depend upon human experience, upon human knowledge, upon human contact with the universe of realities. Man must classify reality according to what he has, by direct experience, come to know of reality. Hence, the true categories, or ultimate classifications of real finite being, must not be *a priori* postulates; they must be the fruit of experience.

The categories, born of experience and study, and found true by constant check with continued experience, enable the philosopher to be orderly and systematic in his efforts, and successful in his achieve-

ment. Without categories, no philosophy of reality would be possible; without the true categories, the adequate and true philosophy of reality is impossible. Hence the need of the categories.

b) BASIS OF THE CATEGORIES

The basis of the categories is *reality* as it is experienced by human beings. The categories therefore are *modes of being*, not modes of thinking. True, the categories serve to make thinking successful, they direct it, they align its results, they unify its findings. But in themselves the categories, despite a necessary relation to mind, are classes of things and not of mental processes. Immanuel Kant (1724-1804) gave to the categories the character of mental grooves or molds through which the "molten metal" of sense-experience is poured to take its final shape. Thus Kant made man's mind the ultimate determinant of reality, a mill which turns out ingots of knowledge. Thus, incidentally, Kant destroyed the trans-subjective value of all human knowledge. Now, the true categories are not mental forms imposed by the mind on the world of experienced reality; they are classes of real things that may be experienced by knowing man. The true categories are not merely *put* into reality; they are *found* there; they are not imposed by the mind, but discovered or disclosed by the mind investigating reality and studying its own experiences with reality.

Further, the categories are based upon a changeless relation which they bear to a consistent and identical human mentality. The mind of man is of the same nature in all human beings of all times. It comes to grips with the same world of reality which waits to be experienced and understood. Deny this, and you sweep away the possibility of true knowledge altogether; you lapse at once into the self-contradiction of utter skepticism. Now, if the human mind can have truth about this world with which it has direct experience, it must have *changelessly true concepts* of things which are *really there*. We know that there is a continuous process of physical change going on in the individual things that make up the universe, but this does not touch our contention. Individual things change; truth about things does not change. Individual things change; but their change involves no change in the essential kind of thing they were before change affected their fundamental being. Once, for example, I know what an apple is, my knowledge is not changed by the fact that an individual apple is eaten or rots away. The objective essence which I know as a circle is not destroyed because a circular hoop is bent into ovular form. The individual hoop has, indeed, ceased to be circular, but the essence circle is not thereby destroyed, so that all men must henceforth understand a circle as something ovular, and all the geometry books burned up as fallacious in their doctrine on the circle. Essences

are, in this sense, *eternal, changeless, necessary, indivisible*. Therefore, the fact of physical change in the bodily universe (whether this change be substantial or accidental) does not alter the fact that the human mind (which is the same in all men of all times) comes to the study of *changeless* reality, and deals with *immutable objects* or *essences that are changeless*. Hence, once the true categories are discovered and listed, tested and certainly known, their service is not subject to change, or to limitations imposed by times, fashions, or special interests.

The true categories, then, are based upon reality as experienced by the unvarying human mind which deals with eternal essences. Lacking the basis of these categories, any proposed classification of reality can but lead the mind astray in its quest for ordered knowledge. The history of thought furnishes us with many a calamitous futility turned out as philosophy (that is, as a fundamental interpretation of reality and a guide to human thinking) by men whose categories were misconceived and misconstrued. Such, for instance, is *idealism* which limits human knowledge to an awareness of one's own states of mind and denies reality altogether. Such is *phenomenalism* which denies the existence of real substances and makes the world a series of *apparent* facts and events. Such is *monism* which was born of an oversimplification of the categories, and which makes the universe a single substance, variously manifested in

what we consider distinct realities. Truly, we require the true categories if we are to have true philosophy. And the true categories must be based upon reality as experienced by the unchanging rational nature of man.

c) ARISTOTLE'S CATEGORIES

Aristotle (384-422 B. C.) took into account not only the abstract concept of being, but the real trans-subjective world as it lies available to the effort of human knowing. He taught that the categories of reality must be discovered by the careful investigation of what man can *know* about *reality*. Both *the mind* and *the reality subject to the mind's quest for knowledge* must be brought under consideration. *What can the mind know about real things?* That is the fundamental question.

It is the part of Criteriology, the philosophy of knowledge, to show what the mind can know, and how far and how certainly it can know things. The point we make here is that to have a valid list of categories, neither mind nor knowable reality is to be denied. We do not invade the field of Criteriology; we do not here present a philosophy of knowledge, truth, certitude. But we take the basic truths of Criteriology as demonstrated, and proceed to a detailed list of the things that the mind seeks to know in reality.

When we investigate the points about real being

that the mind seeks to know, and can know, we find ten distinct questions which indicate the mind's quest:

1. what?
2. how much?
3. what sort?
4. in what relations?
5. what doing?
6. what enduring?
7. where?
8. when?
9. in what attitude?
10. in what external condition?

The answers to the ten questions indicate the categories of Aristotle. There is no finite reality that is not, directly or indirectly, referable to one or the other of these ten. Two thousand years and more of close investigation, of a check-up endlessly repeated, have not brought to light any reality that is not to be listed in any one of these categories. Even Infinite Reality and logical reality are *analogously* referred to them, although they are strictly classes of finite reality. Surely, we are justified in accepting these categories as true, even as we are justified in accepting a tried and tested map.

To name and illustrate the ten categories of Aristotle, let us suppose a situation in which we contem-

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plate a definite real being and put the ten questions listed above. We shall suppose that there is a man standing on a street-corner, talking with his employer, at three o'clock on an autumn afternoon. Keep the picture in mind as the following lists are studied and compared:

QUESTIONS	NAME OF CATEGORY	CATEGORY ILLUSTRATED IN EXAMPLE
1. <i>What</i> is the being or reality?	<i>Substance</i>	A man
2. How <i>much</i> ? (how big or little?)	<i>Quantity</i>	six feet tall; weighs 200
3. What <i>sort</i> ?	<i>Quality</i>	white; American; industrious; Catholic, Republican, etc.
4. In what <i>relations</i> ?	<i>Relation</i>	employee
5. What <i>doing</i> ?	<i>Action</i>	talking
6. What <i>enduring</i> or undergoing?	<i>Passion</i>	fatigue? irritation? satisfaction?
7. <i>Where</i> (is the reality)?	<i>Place</i>	street-corner, town, county, etc.
8. <i>When</i> (is the reality so placed, so acting, so enduring, etc.)?	<i>Time</i>	3 P. M.; autumn; afternoon; etc.
9. In what <i>attitude</i> ?	<i>Posture</i>	standing
10. In what external condition? (state, dress, etc.)	<i>Habit</i>	fully clothed; in working clothes; in business suit; with overcoat on; etc.

Here, then, are the categories: *Substance* and the *Nine Accidents*. Or, to repeat the categories in full:

Substance, Quantity, Quality, Relation, Action, Passion, Place, Time, Posture, Habit. We here append a very brief explanation :

1. *Substance* is a reality (bodily or spiritual) which is suited to exist *itself*, and not as the mark, modification, characteristic, or qualifier of something other than itself. Examples of substance: body, soul, spirit, hill, tree, fire, water. Substance is, in general, contrasted with *the accidents*. And each accident is a reality which is regularly unsuited for existence *itself* or *by itself*, but is fitted to be the mark, modification, characteristic, or qualifier of something else. The *something else* will always be, proximately or ultimately, a substance. A *substance* takes its name from the Latin *sub-stans* "standing under"; a finite substance is regularly marked and modified by accidents and it *stands under* them, supports them in being; and the accidents are said to *inhere* in the substance which they affect. Here we see why God is not properly to be called a *substance*; for God is not marked or qualified by accidents; He does not *stand under* any modification of qualification (for such things are *limitations*). But the true perfection of substance does not lie in the fact that it can support accidents in being, but in the fact that it can exist *itself* or *by itself*. Viewed in this way, the term *substance* is applicable to God. Indeed, God is the *super-substance*, for He not only exists Himself, but He

rived knowledge; it is derived by the mind as a legitimate and indeed an inevitable consequence of the reality of things. It bears the check and proof of experience; it squares with all the facts that we observe. We learn of *bodily substances* first, and, by justified abstraction of mind, we rise to the knowledge of substances that are *non-bodily*. We behold around us a manifold universe of bodies; we unify this manifold in the universal concept of substance (*secondary substance*), and we recognize actual inferiors of this concept in the distinct and various substances that exist as individuals about us (*primary substances*).

d) THE EXISTENCE OF REAL SUBSTANCES

That substances exist in reality, and that the concept of substance is no mere figment or fiction of mind, is a fact made evident by three things: (1) consciousness; (2) sentient experience; (3) reason.

1. *Consciousness* makes us aware that each of us is a reality which remains permanent under a continuous succession of changes and variations. Each of us expresses this consciousness in such phrases as, "I think," "I used to feel," "I wish," "I was near death some years ago, but today I am in the best of health." Each of us is aware of his thoughts and feelings, his states of conviction and of health, as something distinct from and different from *himself*. The thoughts come and go, the feelings are altered,

the convictions may falter, the state of health may deteriorate or improve, but the *self* stays the same, the *self* endures, the *self* is known as a reality which exists itself or in its own right, and it is merely affected by, qualified by, influenced by, the things that make up the succession of experiences which it undergoes. In a word, the self is known by the inevitable awareness of consciousness (upon which is based the worth and truth of all knowledge) as something *substantial*, as a *substance*, which is accidentally affected by thoughts, feelings, wishes, states of health, etc. Therefore, it is a fact within the experience of all that the self (or *the ego*) is known by consciousness as substantial, and is contrasted with the accidental character of the things which merely affect but do not constitute it. Certain modern psychologists, especially those engaged in the study of "psychology of education," are prone to deny what they call "the substantive mind," or, in other words, the substantiality of the human soul and of the human self. These mistaken scientists cut the ground from beneath their own feet; they deal in manifest self-contradictions. For they are forced to assume in fact what they deny in theory. They must take up a substantial soul even for the sake of smashing it. They have neither terms nor concepts to deal with human personalities regarded as non-substantial. They make of life, as they make of mind, a chain of

experiences that do not happen to anybody, and a stream of events that has no channel in which to flow.¹

2. *Sentient experience* of the bodily world around us gives us inevitable knowledge of things that are not, so to speak, standing on their own feet; things which exist by reason of something else. Thus we see that the color of an apple, the heat of a fire, the size of a house, the complexion and the disposition of a man, the speed of a horse, are things which do not, and normally cannot, exist independently of other things which they mark or qualify or affect. Now the apple may turn from green to red and still be an apple, and indeed the same apple; the man may turn from taciturn to gay, and be the same man; the fire may die down and emit less and less heat, and still be true fire. Hence, our sentient experience of the bodily world obtrudes upon us the fact that there are *accidental things* here existing; and that there are other things *in* which these accidental things exist, and which these accidental things qualify and affect. In

¹ Father Coffey (*Ontology or The Theory of Being*, ed. 1918, p. 223) writes: "Once the soul is regarded merely as a 'series of conscious states,' or a 'stream of consciousness,' or a succession of 'pulses of cognitive consciousness,' such elementary facts as memory, unity of consciousness, the feeling of personal identity and personal responsibility, become absolutely inexplicable." Coffey refers the student to Maher (*Psychology*, ch. xxii) for an analysis and refutation of theories that would deny the substantiality of the human person.

a word, sentient experience (considered in mind) shows us the existence of *substances* as well as of *accidents*.

3. *Reason* accepts from nature, from science, from philosophy, the fact of the real existence of the world. Reason says: if things exist in the world, as they do, they must exist in themselves or in other things. If they exist in themselves, they are substances. If they exist in other things, they are accidents. But accidents cannot exist in other accidents, and these in other accidents, and so on forever. One must come finally to a reality which exists in itself; that is, one must come to substance. Hence, whether we take up the study of reality from the standpoint of that which exists in itself, or from the standpoint of that which exists in something other than itself, we come at the last to the same conclusion: that reality, to be reality, demands *the existence of real substances*.

e) FAULTY DOCTRINES ABOUT SUBSTANCE

We have set forth our doctrine of substance as a reality which, independently of the mind, exists or can exist itself. This doctrine is *realistic*, and it stands opposed to doctrines on the point which are *idealistic*, that is, to doctrines which would make substance a mere figment of the mind, a baseless idea or ideal of the mind. Idealism of this type is already refuted in our study of the existence of real substances.

We have already seen that substance is not to be thought of as a core of reality wrapped in the folds of accidentals. We do not conceive of substance and accidents merely as two concrete and separable entities tightly bound together. The substance is affected by its accidents; it is determinable by them; they are actualizations of its potentialities. A change of accidents means a change in the concrete being of the substance, although not in its essential being. The red apple which *became* red after it was green is, indeed, the same apple, but it is not the same in its whole concrete substantiality. Created substance is a limited and an imperfect mode of existence; it is bound up with its accidents, and is not *adequately* distinct from them. Hence there is no simple and direct and concrete way of coming at substance itself; one must take the path of abstraction and derivation; one must come at substance by way of mind working on the findings of sense. But this fact must not make one childishly impatient over the whole question; it must not lead one into over-simplifications; it must not lure one into the silly position of the "nothing else" philosopher who says that substance is "nothing else" or "nothing other" than a collection of accidents; which is like saying that the ocean doesn't exist but that the waves are marvellous; or like saying that the Cheshire cat is non-existent but its grin remains. These misconceptions come from the faulty first notion that substance is a core or

kernel wrapped about with the husks of accidents.

Substance is not an inert substratum underlying accidental features and activities. That is apparently what René Descartes (1596–1650) thought of it, or rather, what he thought of what we call substance in this finite world; he himself defined substance as self-existent reality, and thus made God the only true substance. Substance is not inert, though we do study it under *static* aspects. On the other hand, substance is not *defined* by its activity, for a substance as active is called *a nature*. Leibnitz (1646–1716) made the mistake of identifying substance and nature. Spinoza (1632–1677) made substance an uncaused being (“that which, for its idea, requires the idea of no other thing”), thus identifying substance and God. Cousin (1792–1867) comes close to Spinoza’s position by defining substance as that which has in itself no reference or relation to anything else (even to its cause!).

Against all these mistaken views of substance we allege the clear doctrine which we have already set forth and evidenced. And we repeat the declaration that, while we can and must know of the existence of real substances, and while we can and must know much of the nature of substance, we have here a deep and complex subject of study, one that defies simple statement and exhaustive treatment. We can and do know much about substance, but we do not and cannot know *all* about substance.

f) SUBSISTENCE

The crowning perfection by which an individual and actual substance stands, so to speak, on its own feet, ready to function as a rounded nature, is called *subsistence*. A substance that is a *complete individual* (i. e., primary substance), not merely a portion or element of a larger substance; which has *its own autonomy* or its own way of acting, is a *subsistent* substance or, as it is called, a *suppositum* or *supposit*. A man or a tree is a supposit. A man's hand is a substantial thing; it is a substance; but it is not a supposit; it has substantiality but not subsistence. For the man's hand has not its own completeness and autonomy; it is a part of the man; its actions are the *man's* actions. An old axiom says, *Actiones sunt suppositorum*, that is, the actions of a substance are the actions of the supposit. Thus, though a murder is committed by the stroke of an arm or the pressing of a finger against a trigger, the courts of law do not consign the arm or finger to gallows or electric chair; the courts condemn *the man* who used the arm or finger; these substantial things are but parts of the man, and their action is his action; he is the supposit, and "actions are of the supposit."

For a reality to have *subsistence*, it must be: (1) a *substance*; an accident cannot be subsistent; (2) an *individual substance*, not a secondary substance, that is, a universal, an essence conceived objectively but abstractly and universally in the mind; (3) a *com-*

plete substance, not the substantial part (essential or integral) of a compound substance; (4) an *autonomous substance*, that is, a substance that is a finished nature with its own laws and ways of acting (*sui juris* is the ancient Latin phrase for this requirement).

g) THE HUMAN SUBSTANCE

When we speak of *the human substance*, we do not mean to say that there is a general or universal human mass of which individual men are the sharers or participants. We should more properly speak of human *substances*, for the only human substance that exists is that which is found in individual human beings. Things can actually exist (as we have learned elsewhere in our study) only *in individual*, although they be unified in our knowledge, and mentally conceived *in universal*. Therefore, we speak here of the individual human substance, the human substance as it is found in actual human beings.

The individual human substance is a supposit, for it is a complete, individual, autonomous substance. Thus it has *subsistence*. More: its subsistence, its crowning perfection which sets it in being as a completely rounded nature functioning in its own conatural way, is subsistence of a special type and makes it a supposit of a special kind. Human subsistence makes the individual man (the individual

human substance) a supposit *of the rational order*, that is, a supposit endowed with rationality, a supposit endowed *in actu primo* with understanding and free-will. Now, that type of subsistence which makes a substance a complete, individual, autonomous substance of the rational order, is called *personality*. And the substance which has such subsistence is a *person*. Of all creatures, only men and angels are *persons*.

Every human being has personality; every human being is a person. The term *personality* is used here in its strictly philosophical sense. It does not suggest, as it does in much popular "psychological" writing and discussion, a kind of impressiveness, a power to influence others, a thing composed of such elements as charm of manner, resonance of voice, alertness, self-assurance, and so on. *Personality* is here understood as the subsistence which makes a substance a supposit of the rational order. Even the unborn child, from the very first moment of conception, is, in the truest and fullest sense, a *person* and has *personality*.

Nor do we mean by *personality* the outer manifestation of character or disposition, of whim and caprice, of moodiness and variability of conduct, of which people speak when they say, "He has an odd personality," or "He is a reliable personality," or "He has a dual personality," or "He has a Jekyll and

Hyde personality." Manifestly, this "personality" is merely a matter of observable qualities. And most of us have our "moods and tenses"; we have our ups and downs, our hours of vivacity and our hours of depression and languor. Of almost every man or woman it has been said, on some great or some dire occasion, "Why, he seemed a different person altogether," or "She is a completely changed person." We repeat: our use of the term *person* and the term *personality* has nothing to do with this manifested character or disposition,—“the empirical ego,” as it is sometimes called. Our use of the terms has to do with *the substantial ego*, the subsistence which makes the human individual a supposit of the rational order. And this personality cannot be “dual,” or “multiple,” or variable; this personality cannot be changed by the most startling or the most momentous of events.

The human substance (in individual) as constituted in its essential structure and ready for its conatural operations is an individual human *nature*. To this individual nature, subsistence (which, in the case considered, is *personality*) adds something real and positive and intrinsic, which makes the individual a *supposit*, and, in our present case, a supposit of the rational order, that is, a *person*. There is, therefore, a real distinction between the individual nature and its subsistence, between *nature* and *person* in the individual. In the Incarnation, the Eternal Second Per-

son of the Holy Trinity took human *nature* and became man. But He did not take human *personality*. The Divine Person of the Son of God subsists henceforth also in human nature. Christ is therefore only one Person; He is the Second Person of the Trinity. And Christ has *two natures*, the nature of *God*, which He has from eternity and which is one and undivided among the Three Divine Persons; and the nature of *man*, which He took in the bosom of His Blessed Mother. Now, as we have seen, the actions or activities of a substance are the actions of *the supposit*, or, in the case of the human substance, of *the person*. Hence the actions and activities of Our Lord, in His human as well as in His divine nature, are the actions and activities of the Divine Second Person of the Trinity; they are the actions and activities of God. Once more we have briefly invaded the field of theology, but this little digression from strict philosophical procedure is justified both by the importance of the point mentioned and by its close connection with the philosophical doctrine of personality.

Many items of interest touching the subject of person and personality might be discussed here. Such, for instance, are the nature of man's physical constitution, the substantial character of the union of soul and body, and the manner in which soul and body interact. Yet these are points properly treated in philosophical psychology and not in ontology.

SUMMARY OF THE ARTICLE

In this Article we have learned the meaning of *substance*, and have studied the implications of both its *nominal* and its *real* definition. We have classified substance as *primary and secondary; complete and incomplete; simple and compound; material and non-material*. We have investigated our knowledge of substance, and have found that, while this is no intuitive and direct knowledge, it is derived knowledge that is true and reliable. We have demonstrated the existence of real substances in the world about us, drawing proofs from consciousness, sentient experience, and reason. We have briefly mentioned and criticized certain faulty notions about substance, and have seen that doctrines developed from such notions are fallacious. We have learned the meaning of *subsistence*, and have dwelt upon that notable type of subsistence which is called *personality*. We have defined *supposit* and *person*.

ARTICLE 3. CERTAIN ACCIDENTS

- a) Quality b) Relation c) Quantity d) Action,
Passion, Motion e) Place and Space f) Time

a) QUALITY

We often say that any accident *qualifies* its subject. The word *qualify* (and its cognate *quality*) is thus seen to be capable of a wide or loose meaning.

In such a meaning, any accident which tells us something about *what sort* of thing its subject is, is a *quality*. Strictly, however, a quality is an accident which modifies or influences a substance in itself or in its activities. Even this definition seems somewhat vague; it is necessarily so, since the accident of quality is so widely inclusive. But, in general, it may be said that any quality makes the substance which it affects better or worse in itself, or makes it function more easily or less easily.

Marks of a quality are these: (1) It is a thing which has an opposite, and qualities may be listed in opposed pairs. Thus, virtue, vice; knowledge, ignorance; health, illness; whiteness, blackness, are examples of opposed qualities. (2) It is a thing of degrees, being capable of increase or diminishment. Thus, virtue may be ordinary or superior, knowledge may be greater or lesser, and so on. (3) It is a thing which serves as a basis of comparison. Thus things which are like in quality are called *similar*, and things which differ in point of quality are, in so far, *dissimilar*.

Important types of quality are, as we have briefly noticed elsewhere, the following:

1. *Dispositions and habits*. A *habit* is a settled and enduring quality, born of repeated acts or of a continued state of being, which influences a substance in itself or its operations. A habit is firmly fixed and not readily removable. Before it becomes so fixed, and

while it is still relatively easy to remove, it is called a *disposition*. Thus a child who has lied a few times to avoid difficulties may be said to have the *disposition* to escape trouble in this unworthy way; continued lying will fix the practice as a *habit*. Thus a pupil who has, by taste or effort, acquired a liking for serious study, is *disposed* to do good work, and continued application will make regular study a *habit*. A habit, in casual or colloquial use of the term, suggests the *doing* of something as a regular practice, but it need not be limited to this meaning. Continued sickness is a habit; enduring health is a habit; fatness or leanness is a habit. These latter are called habits of being or *entitative habits*, while the habits of doing are *operative habits*. The ability to typewrite rapidly is an operative habit; so is the ability to skate, or to play the piano, or to read French; these are things acquired by continued effort and repetition, and they are not easily lost or removed, even though they be not often exercised after they have once become a fixed possession. A habit is distinguished as *good* or *bad*, according to the effect it has on action or conduct. Vice is a morally bad habit; virtue is a morally good habit. Chewing tobacco is a socially bad habit. Cleansing one's teeth twice daily is a hygienically good habit. But usually the terms *good* and *bad* have, as descriptive of habit, a *moral* implication. Again, a habit is distinguished as *natural* or *supernatural*; a natural habit is one acquired

by the unaided powers of nature; a supernatural habit is one that cannot be achieved by natural powers but is bestowed by God. Thus, knowledge gained by study, is a natural habit; sanctifying grace is a supernatural habit. The basic meaning of *habit* (from Latin *habitus* the passive past participle of the verb "to have") is "a thing *had*, a thing one has *got*," a thing that *stays*. A grasp of this fundamental meaning of the term will clear up all that seems unusual in the distinction of various habits that we have just made.—The cultivation of good (operative) habits is of immense practical importance for the conduct of life. Good habits render "the right thing" prompt and easy in ordinary circumstances, and in moments of great stress of temptation they furnish the most favorable ground for the operation of actual grace. What is called a man's "character" is largely a matter of acquired natural and supernatural habits.

2. *Capacities*. A capacity or *power* is the faculty for doing something. All the activity of a substance comes from its *nature* (for nature means an essence viewed as the root and source of operations), but nature is not operative *immediately*, but only through faculties or powers or capacities which inhere in it as qualities. Thus the capacity for thinking (the mind or intellect) and for choosing (the will) and the capacities for sensing (sight, hearing, touch, taste, smell, imagination, memory, consciousness, instinct) are not the substance of a man, nor the nature of a

man, but powers (which in themselves are *accidents*, and *qualities*) which serve the man in his connatural activities. The noblest of human faculties are, of course, the soul-faculties of mind and will. When a man uses these well, we say that he is a man of fine qualities. Since capacities or powers are qualities, they must have their respective opposites; for we have seen that this is a requirement of quality. The opposite of power is *impotence, debility, weakness*. Thus the quality of keen-sightedness has its opposite quality in weak-sightedness.

3. *Passive characteristics.* The term *passion* has many meanings in English, and the most common one is that of a strong emotion. But its literal meaning is "an undergoing or an enduring." Of course, when one is strongly moved (as by anger or by love) one undergoes, one suffers, one endures something; yet here one is apt to think of the passion as the active force which produces the emotion; literally it is not so. When one endures cold, or heat, or when one undergoes a change of color, as of paleness through fright or a flushing of the face because of anger or embarrassment, one experiences *passion* in the strict and literal sense. Now, the *actual undergoing* of influences (actions) is the special category called *the accident of passion*, which is the terminus and the complement of *the accident of action*. The *result* in a substance of the enduring or undergoing of influence (action) is the accident of *quality*, which we

exists *of* Himself, necessarily, causelessly. However, the literal meaning of the term *substance* limits it to the order of finite reality; indeed, all the categories are classifications of real *finite* being.

2. *Quantity* is the spatial extension of bodily substance. When we say a thing is big or little we express a *quality* rather than quantity; *quantity* is more definite; it indicates, in terms of measurement, *how* big or little, *how* much. When we say a tree is forty feet high, or that a man weighs about 200 pounds, or that a rug is "nine by twelve," we indicate *quantities*.

3. *Quality* is, of all accidents, the most inclusive; it is the widest accident in scope of meaning and application. It indicates what *sort* or *kind* a thing is. Most adjectives are expressive of qualities. A list of the more important qualities may be arranged as follows: (a) *Dispositions and habits*: prudence, for example, studiousness, rashness, credulity, are qualities of mind or will. Fatness, leanness, healthiness, robustness, are qualities of body. (b) *Capacities*: sensibility, keen-sightedness, responsiveness of thought or imagination, are examples of quality as capacity. (c) *Passive characteristics*: color, complexion, age, temperature, etc., are qualities of this type. Temperature and age can also be quantities when they are presented in more or less definite terms of measurement or degree. (d) *Outlines or*

figures: roundness, angularity, straightness, curvedness, are qualities of this type.

4. *Relation* is the order, the standing, the habitude, of one thing towards another. Examples of relation are found in equality, identity, paternity, servitude. Notice that relation is not a simple accident, but involves *two* things at least (and sometimes more than two) and exists *between* (or *among*) them.

5. *Action* is the producing of an effect. That which *acts* regularly produces modification or change; it *affects* something even as it effects its own result. Action is indicated in terms such as *talking, walking, hitting, wounding, thinking, whistling, attending*.

6. *Passion* is the receiving or enduring or undergoing of change. It indicates a being as *affected*, and thus it is the correlative and complement of action. Passion is indicated in terms like *being hit, being wounded, being impelled*. Transitive verbs regularly express *action* in their active voice, and *passion* in their passive voice.

7. *Place* is position of a body in space, with reference to other bodies; it is expressed in terms such as, *here at home, down town, in that corner, on the ground, out west*.

8. *Time* is the position of a body or of an event with reference to what precedes and what follows. It is indicated by such expressions as, *at nine o'clock; after school; to-day; last year; before noon; in 1492*.

9. *Posture* indicates the relative position of parts

of the same body. It is expressed in such terms as, *standing, sitting, lying down, lolling about, huddled up, outstretched, sprawling.*

10. *Habit* indicates external adjuncts of a body. It is expressed in terms such as, *well-dressed, in full armor, moss-covered, ivy-clad.* The term *habit* as a special accident is always expressive of material and external things. A mental habit or an intrinsic bodily habit is something quite different from this "predicamental habit"; as we have seen, a mental or bodily habit is a *quality.*

Strictly speaking, a substance *is a being,* and *has being.* An accident is *a modification of a being,* and has *in-being.* An accident is said to *inhere* in the substance which it (directly or indirectly) qualifies or modifies or marks. An accident may qualify a substance *directly* (as motion or movement qualifies a flying bullet), or *indirectly* (as speed or direction qualifies the movement of the bullet, and, through the movement, qualifies the bullet itself). Thus there is such a thing as "the accident of an accident" (e. g., velocity of motion), but not in any absolute sense; there is always a substance at the bottom of the accidents, no matter how these are massed and intertwined, and the substance is needed to give reality to all the accidents concerned. It is not manifestly impossible for certain accidents to exist without a substance in which to inhere. Such accidents would be *absolute accidents,* that is, accidents which really

confer a new entity upon the substance which they affect (such as quantity, or heat), and not merely *modal accidents*, that is, accidents which indicate the degree, or manner of presence, of an entity (such as straightness of a line, or degree of heat, or velocity of motion). In the order of nature, however, even absolute accidents do not occur without a substance in which to inhere. The point we make is that there exists no intrinsic or metaphysical impossibility of absolute accidents existing without a substance; the concept of such a thing is not self-contradictory. And, indeed, by divine faith we know that such a thing is not only possible, but is an actual fact. When bread and wine are substantially changed into the Body and Blood of Christ (*transubstantiation*), the accidents of the bread and wine remain. These do not become the accidents of the substance of Christ; they remain the accidents of the bread and wine; that is, they remain the existing accidents of a substance which is no longer there to support them in being. It is the common doctrine of theologians that the absolute accident of *quantity* endures after the substance of the bread and the wine has been changed, and that the other accidents of the sacred species (shape, size, color, taste, etc.) inhere in this quantity. This, however, is not a matter of philosophy, but of theology; it is mentioned here merely in passing, for the fuller information of the Catholic student.

accidents. And right here the student is warned not to take the term *support* in too literal a meaning. For substance is not to be conceived as a kind of nucleus, or core, or kernel, wrapped up in accidents as an ear of corn is wrapped up in its husks, or as the pulp of an orange is wrapped up in its peel. You cannot come at substance in a bodily thing by tearing away an outer wrapping of accidentals. Substance is not handled, in its pure or unaffected form, by the hands, or laid hold of by the senses. No man hath seen substance at any time. Substance is *known*, it is *understood*; it is necessarily understood by the mind or intellect in its investigation of the universe. Nor is it a mere *postulate* of mind, a mere *supposition* of intellect; it is a *known reality*. But we shall come to this point again. For the present, we repeat that *the nominal definition* of substance (from *sub* "under," and *stans* "standing") describes it as the support of accidents.

The real definition of substance is this: Substance is a reality which is fitted for existence *itself* (or *in* itself, or *by* itself) and does not require some other thing in which it is to have being as a mark, modifier, qualification, or characteristic. The essential point about a substance is that it is existible *per se*, or by itself. That substance is the reality which makes possible the real existence of accidents is secondary; it is not the fundamental and essential requirement of substance itself; there is nothing in the abstract idea

of substance which demands that it have accidents. Hence we see the inadequacy of the nominal definition of substance, and we notice the misconception which that definition may suggest to an unwary mind. Of course, a substance in this universe of finite and bodily realities, is regularly affected by real accidents, and, indeed, it is through the accidents, and their appeal to our senses, that we come to know the existence and the nature of substance. This fact, however, does not touch our contention that *substance as such* does not involve in its concept or idea the note of actual accidents which affect it.

The formal (i. e., constituting) element about substance, therefore, is this: it is existible *per se*, existible *itself*, existible *in* or *by* itself. We do not say that a substance is existible *of* itself; for that would mean that a substance is self-existent, and uncaused. Only God, the Infinite Being, exists *of* Himself. A finite substance requires its producing cause; it is an *effect* of its cause or sum of causes. Further, it requires the conserving power of the Creator to keep it in existence, and His concurring power to render it operative according to the capacities and tendencies of its nature. But, given existence, the substance is the thing which exists; it exists itself; it is not the "hanger on" of something else. When we say that a substance is existible *by* itself we do not mean that a substance exists "alone" and that no other substance can simultaneously exist; we do

mean that an existing substance is fundamentally independent of the accidents which happen to inhere in it. Thus the rosy apple which I hold in my hand, is large, sweet, red, hard, smooth, in this place, at rest or moved about by my fingers. Now this size, color, flavor, hardness, smoothness, rest or motion, presence in this place, are *accidents* of the apple; they exist, not by themselves, but as *things which affect this apple*; they in-exist in the apple as in their *subject*. But the apple could be an apple, and even this apple as far as substance goes, if all these accidents were different. This explains what we mean by saying that the substance of the apple exists by itself; we mean that the substance is the fundamentally important thing in this complex existence called "this apple with all its accidents"; we mean that this substance is basically independent of the precise accidents which are here and now found in it, and could "get on" without them *by itself*.

Substance is, therefore, a reality or essence which is existible *per se*. Secondarily, it is a reality in which accidents may inhere; that is, it can be the *subject* of accidents (from Latin *subjectum* "throw under"; and a substance is, so to speak, *thrown under* the qualification of the accidents which affect it). A substance is a finite reality. Only by analogy do we speak of God as a substance. All that is most perfect in the concept of substance is to be attributed to God *eminently*, or in a transcendent way, and all that is im-

perfect in the concept is to be excluded from this attribution. Thus, inasmuch as substance is that which is existible itself, God is the perfect substance. Inasmuch as substance may be the subject of accidents, God is not a substance.

b) CLASSIFICATION OF SUBSTANCE

I. Primary—secondary. A *primary* substance (usually called by its Latin name, *substantia prima*) is an existing *individual* substance. Thus, Tom, Mary, this tree, my guardian angel, are primary substances. A primary substance is neither an accidental, nor is it something *predicable* of things other than itself. Tom is Tom; he is not an accidental reality but a substantial one; nor is Tom predicable of others (as “this stick is Tom,” or “that stone is Tom”); Tom is this one human being, singular, concrete, not referable to something else as its essence. A primary substance is called also a *physical substance*.—A *secondary* substance (Latin, *substantia secunda*) is a substance conceived abstractly and universally by the mind. Thus the idea *man* is the idea of a substantial reality, not an accidental one like *whiteness*, for instance. It *means* a substance. Its object (i. e., *the universal “man”*; *the human essence* objectively conceived) is something existible only in individually existing substances. Now, the universal (the objective essence conceived abstractly in the mind) is not *itself* a substance in a primary

way, but it is called a *secondary* substance. A secondary substance is defined as a reality which is not an accidental, but is predicable of things other than itself. Thus the universal *man* (i. e., the essence *man* conceived in the idea or concept of man) is predicable of all individual human beings, for each of these *is* a man, a human being. Thus we rightly say, "Tom is a man, Mary is a man, the baby is a man," and so on. The secondary substance is referable to things other than itself (its inferiors) as their essence. In a word, a primary substance is a concrete, individual, actually existing substance; a secondary substance is the essence of a substantial reality conceived universally in the mind. A primary substance is an actual individual; a secondary substance is a universal. A secondary substance is sometimes called a *metaphysical substance*.

2. *Complete—incomplete*. A primary substance is *complete* when it is a finished nature, fitted for existence with all its connatural functions; it is not ordained towards another substance for substantial union therewith. A man or a tree or an angel is a complete substance.—A primary substance is *incomplete* when it is ordained towards another substance for substantial union therewith, so that the resultant compound substance will be a finished nature with all its connatural functions. Prime matter and substantial form are incomplete substances; they come to-

gether in substantial union to constitute a body, which is the resultant complete substance. A substance may be incomplete in one of two ways: (a) It may be incomplete *in substantiality and in species*, that is, it may be incapable of existence either as a *substance* or as the *complete essence* towards which it is ordained as a constituting factor. Thus, the life-principle of a plant is a substance *incomplete both in substantiality and in species*. It is incomplete in substantiality, for it cannot exist without its co-substance which is the organic body of the plant; it is incomplete in species, for it is manifestly not the complete essence called *plant*, but is only a substantial element of that essence. (b) A substance may be *incomplete in species, and complete in substantiality or incomplete in species only*. Thus the human life-principle or soul is a complete soul; it is a substance which can exist without its co-substance, the organic body. But the human soul is not the complete species (or complete essence) towards which it is ordained as a substantial element; it is not the complete *human being*. In other words, the soul is complete inasmuch as it is an existible substance (i. e., complete in substantiality), but it is not complete as *the substance* of which it is an essential part; it is not complete *man* (i. e., it is incomplete in species).—Substances that are incomplete both in substantiality and in species are true substances, not accidents; they cannot indeed

exist without their respective co-substances, but they are not things which *inhere* in co-substances; they *co-exist* in substantial union, they do not *inhere*.

3. *Simple—compound*. A *simple* substance is not made up of parts; that is, it is not made up of two or more incomplete substances. A plant-soul, a human soul, or any substantial form is a simple substance, even though incomplete. An angel is a simple and complete substance.—A *compound* or *composed* substance is made up of two or more incomplete substances. A body (made of matter and form), a man (made of body and soul), are examples of *compound* or *composed* substance.

4. *Material—non-material*. A material substance is either composed of matter (and is therefore a body) or it is dependent for its being and activities upon matter. A tree or a man is a material substance. So is the life-principle or soul of a tree. This life-principle is not, indeed, made up of matter, but it depends upon matter; it cannot exist or function without the material organism which it vivifies or makes alive.—A *non-material* or *spiritual* substance is neither composed of matter, in whole or in part (and, indeed, a non-material substance is simple and has no parts), nor is it dependent upon matter for its existence and proper operations. The human soul is a spiritual or non-material substance; so is an angel.—In passing, it must be noted that while a spir-

itual (or non-material) substance is always a simple substance, it does not follow that every simple substance is spiritual. The substantial form of any body, as, for instance, the life-principle which is the substantial form of a plant, is *simple*, for it is not *made up* of bodily parts; but it is material, and not spiritual, because it *depends* upon matter, i. e., upon that which is made up of bodily parts. We do not call such a substance *bodily*; we do call it *material*. For a *bodily* substance is *composed* of material elements or parts; a *material* substance is either composed of parts (and hence is bodily) or *depends upon* that which is composed of parts, although it has no constituting parts of its own.

c) OUR KNOWLEDGE OF SUBSTANCE

We have no *intuitive* knowledge of substance. That is, we have no immediate and direct mental grasp of substance as such. Our knowledge begins with the action of *the senses*, and the senses do not have substance as their object. The senses lay hold of accidents. But the intellect, taking the findings of the senses, discerns the underlying reality which we call substance. Nor is this a mere *supposed* foundation for accidents. It is not, as John Locke (1632-1704) declared, "an unknown something" which the mind posits as the support for accidents. Substance is far from *unknown*. We may know much about it, gath-

ering justified data by the intellectual investigation of sense-findings. But, we repeat, we have no immediate and *intuitive* knowledge of substance as such; we have a justifiably *derived* knowledge of it.

We can know the *existence* of real substances, and we can know the specific *nature* of substance. These points are discoverable by the mind in its study of accidental reality, and especially in its study of those accidents that are called *proper accidents* or *properties*. Such accidents are *revealing* things. The old sayings, "Handsome is as handsome does," and "Actions speak louder than words," may be adapted to express the truth that "A substance is as a substance reveals itself in proper accidents and activities." For the proper activities and the proper determinants of a thing follow upon and express what the thing is in itself. *Agere sequitur esse*, that is, "Function follows essence." Therefore, a careful study of sense-findings, a reflecting upon and an analysis of observed properties, activities, functions, behavior, must lead us to a knowledge of the *existence* and *nature* of the fundamental reality which is marked by such properties, and which so acts, so functions, so behaves. And this knowledge is clarified and fortified by what may be called the "check-up of mediate experience." That is, this knowledge meets the requirements of daily life and hourly experience; it squares with facts; it fits into our inevitable interpretation of the universe. And the theories which doubt or deny the

possibility of knowledge about substance do not so check with the actual facts and experiences of our life. Indeed, every such theory is self-contradictory. It begins by denying substance (flatly or equivalently) and ends by asserting that accidents are all substantial; at least, this assertion is implicitly made in the manner in which the theorists think of accidents and speak of them.

To deny or doubt the trustworthiness of our intellect in deriving the concept of substance from sense-findings of accidents, is to deny the truth of all knowledge and to lapse into the self-contradiction of skepticism. For *all* our knowledge, of things concrete and of things abstract, of things most evident and of things most abstruse, *begins with the action of the senses*. Therefore, if the senses do not avail to furnish the mind with the reality from which it works out its true and reliable concept of substance, these senses do not avail to furnish the mind with reality from which to form any true concepts at all. What evidence, what grounds, what criterion can be suggested, according to which the senses are to be known as reliable in the one case and not reliable in the other? Therefore, to deny the power of the mind to know substance, is to deny it power for true knowledge altogether. And this is skepticism, which, as is proved in Criteriology, is a self-contradictory and impossible doctrine.

Our first knowledge of substance is doubtless an

implicit concept. That is, it is "infolded" in the earliest cognitions of life. When we began to know things, we took the world around us at face value, and the things that we experienced we considered as existing in their own right. In a word, we took all bodily objects, especially those perceived by touch and sight, as substantial. But soon we noticed differences in these sense-objects. The cry of a baby was soon recognized as a different sort of thing from the baby itself; it was quickly understood as something that depends upon the baby and proceeds from the baby, and does not have existence in or by itself. So too we noticed that the lad scampering home from school was more manifestly an existing *thing* (that is, a thing existing itself, or in its own right) than the movement of his flying feet. Thus early in childhood the concept of *substance* and of *accident* (as yet *implicit*) emerged to the forefront of the mind's view of reality. The movement and the hum of a spinning top were known as belonging to some other category of things than that to which the top itself belongs; the color of a toy was seen to mark and qualify the toy. Substance and accident are inevitable classifications forced upon the mind, not by its bent or bias, not by some mysterious outer force, but by *recognized reality*. And all human experience checks with this classification, establishing it clearly and solidly as fundamental in all knowledge.

Our knowledge of substance is, therefore, a de-

here call, somewhat lamely and inadequately, a *passive characteristic*. Thus the actual undergoing of a sensation of fright is *passion*, not quality. But the resultant state of the substance affected by passion, the paling of the face, the trembling of the hands, is *quality*, or "passive characteristic" which is a type of quality. This type of quality is, unfortunately for minds easily muddled, also called by the simple term *passion* if it is a quickly passing quality, a transitory state or condition of the substance affected. If this quality is an enduring thing, it is called *passive quality*, or, in the old Latin phrase, *qualitas patibilis*. Thus the paling of the face, the sinking of the heart, the trembling of the hands, are qualities called *passions*, for these things are, of their nature, fleeting and transitory. But the ordinary state of the complexion, the regular temperature of the body (which are things produced by normal influences) are not fleeting or transitory, but tend to endure; therefore, these things are called, not passions, but *passive qualities*.

4. *Outlines and figures*. The outline or figure or form or shape of a thing is the limit of its quantity. Every actual body has quantity, and the quantity has ends, terminations, limits, points where it breaks off. These limits determine the shape of the body, or its outline or form or figure. The form or figure is not the substance affected by it, nor the quantity of that substance; a ball of wax that weighs one pound is

not changed in substance or in quantity when the wax is reshaped. The form or figure of a bodily substance is a *quality* of the substance; it is a quality of quantified matter. By an ancient usage, the term *form* was used only with reference to artificial things, like houses, or paintings, or wagons, or clocks; and the term *figure* was used with reference to natural substances like trees or horses or men. Later usage, however, has made the terms *form* and *figure* practically synonymous and interchangeable, and has added a new synonym, *shape*.—In passing, the student is warned that the term *form* (which here means, of course, *accidental* form, and of a special type) is a most potent and most frequently recurrent word in a philosopher's vocabulary. In general, a *form* means any determinateness of being, essential or non-essential, substantial or accidental. In this sense, all accidents are *forms* (accidental forms), and the essence, the nature, the subsistence of a substance are *forms*; the substance itself is constituted in its character as an existing thing of definite essence and nature by its *substantial form*.

b) RELATION

We have defined *accident* in general as that reality which is not fitted for existence in itself or by itself, but regularly exists *in* something other than itself as a mark, qualifier, characteristic, or determinant. In a word, an accident exists *in* the subject which it

affects; it *in*-exists, rather than exists. But there is one accident of the nine that is not accurately described as an *in*-existing reality. This exceptional accident is *relation*. For relation is not something which inheres in a subject, or *in*-exists; it is rather something that exists *between* two subjects, or *among* a plurality of subjects. Relation is the standing, the ordering, the habitude of one thing towards another. The world about us is marked by a most complex tissue of relations or relationships.²

It is possible for us to consider certain realities *alone*, and in this view they are called *absolute* realities. Thus we can consider a man, or a man's appearance, or a tree, or a field of corn. But if we take into account all that can be known about such things, we inevitably see them in *relations* which they bear to other things. The man is somebody's son; the man's appearance makes him similar to others, or dissimilar; the tree is like or unlike other trees; the field of corn suggests somebody who planted the corn. Indeed, everything can be seen in relationships or relations which tie it up with other things. Some things can be regarded as absolute; but some cannot. Thus, for example you cannot conceive of *parent* absolutely; for *parent* means a person who bears a relationship to *offspring*. You cannot think of *son* or *daughter* with-

² The most obvious and the most important of relations is that of *causality*. To this relationship we devote an entire Chapter, called "Beings in Their Causes."

out involving in the thought the idea of *parent*. You cannot think of *king* without thinking of *subjects*, for a king is miscalled, and is not a king, unless he holds the place of rule over subjects. Thus, there are some realities which, of necessity, involve a reference to others. Such realities are called *relative*. We may put the whole matter thus : things that can be known by themselves without reference to anything else are *absolute*; things which cannot be known alone but are necessarily known as related to other things, are *relative*. Of course, in a strict sense, only God is truly an *absolute* Being. Every creature depends upon God, and is *related* to God, as to its First Cause. But, omitting this fundamental relation which affects all positive reality, we assert that among creatures themselves there are some that can be seen in an absolute light, and some that cannot be seen except as involving reference to other things; and on this basis we classify creatures as *absolute* and *relative*.

Now, is relation all a matter of *seeing* things, of *knowing* them? If so, relation is a thing of the mind, a logical entity and not a real entity. That there *can* be logical relations is manifest; such is the relation between the subject and predicate of a sentence; such is the relation between a red flag and danger; such is the relation between a laurel wreath and triumph. These relationships are unquestionably due to the view of the mind or the invention of men; they are not a necessarily objective state of facts in the world

of realities which does not depend on man's mind or man's view or man's customs. They are logical relations. But we assert that there are also *real* relations in the world, and many of them. A child is related to his parents, as effect to cause, independently of man's view of the case. The pillars in St. Peter's Basilica are alike, whether anyone notices the fact or not; they bear to one another the relation of similarity (and that, in each of them, which is the basis of comparison, is the *quality* of likeness). The first distinction of relations is that of *logical relations* and *real relations*. Logical relations are the "tie-ups" that depend on knowledge, or invention, or understood custom. Real relations are the product of things taken independently, and not in a special view of mind, or as a special arrangement or form of symbol invented by man.

Relations are further distinguished as *essential* and *non-essential*. An essential relation is the very essence of a thing inasmuch as it involves a reference to something else. Thus the soul is created expressly for union with the body so that, in substantial union therewith, it may constitute man. The soul is *essentially* directed to, ordained to, referred to, *related* to the body. This is an essential relation. Again, between two and four, there is the relation of half to whole; this relation is necessary; it cannot be different; it belongs to the very essence of the two quantities; it is an essential relation. An essential relation holds

everywhere and always between or among the essences concerned. It transcends times, occasions, conditions, circumstances. Therefore an essential relation is often called a *transcendental* relation.—A non-essential relation (or an *accidental* or a *predicamental relation*) is one that happens to be there, but need not be, by any necessity based on the nature or essence of the things related.⁸ That John looks like Joe may be an actual fact and a real relation; but it is manifest that this resemblance is an accidental thing, not an essential one. It may be that John is later disfigured by disease or accident, and no longer looks like Joe. And still John and Joe are the same essences they were before the change occurred. For a predicamental or non-essential relation we find a basis in *quantity*, in *quality*, or in *action-passion*; quantity is the basis of the relations of equality and inequality; quality is the basis of the relations of likeness and unlikeness, similarity or dissimilarity; action-passion is the basis of the relation of origin or causality.

A relation is *mutual* when it works two ways, when it is truly reciprocal. Thus the relation between parent and offspring is mutual. Parent *means* a person who has a child; offspring *means* a person who has a parent. From the standpoint of the parent, this relation is *paternity* or *maternity*; from the standpoint of the child, this relation is *filiation*. Thus, as is evident,

⁸ It is of predicamental relation that we speak in the present study.

the relation between parent and offspring is mutual or reciprocal, but it is not the same from the respective standpoints of the things related. It is a *mutual but unequal* relationship. Between John and Joe who look alike there is a mutual relationship of similarity which is the same from the standpoints of both things related: John looks like Joe; Joe looks like John. This is a *mutual and equal* relationship.—A relation is *non-mutual* or *non-reciprocal* when it does not work two ways. Thus, there is a relation between the mind of a man and a reality known to that mind, between knowledge and a real object of knowledge. But this relation is *non-mutual*. The man's knowledge depends on the object, for the object must be there before it can be known. But the object does not depend on the man's knowledge, and would be there, and be the same, whether the man knew it or not. Again, the relation between God and creatures is a real but non-mutual relation. Creatures depend on God, and necessarily stand in the relation of dependency upon Him; God must be there, or the creatures cannot be there. But the relation does not work the other way. God does not depend on creatures; and God would be there whether creatures were there or not there.

In every relation we distinguish three elements: *the subject, the term, and the basis*. The subject is that which is referred to something else. The term is that to which the subject is referred. And the basis is the reason by which the subject is referred to the

term. Thus, in the relation called *paternity* or *fatherhood*, which exists between father and son (from the standpoint of the father), *the subject* is the father; the father is the reality referred to or related to the son. *The term* is the son. *The basis* is the process of generation, the physical having of offspring (the action-passion) which makes the father the progenitor of the son. Take the same relation from the standpoint of the son; it is now the relation of *filiation* or *sonship*, not of paternity. The subject is the son; the term is the father; the basis is the process of generation (action-passion, with the emphasis now on passion) which makes the son the offspring of the father. Take another example: John looks like Joe. Here the subject is John; the term is Joe; the basis is the quality of appearance in John and in Joe. Turn the relation around (since it is mutual and equal), and say: Joe looks like John. Here the subject is Joe; the term is John; the basis is the quality of appearance in Joe and John.

There are real relations in the world about us, but the world does not consist of relations. And in the truths that we can acquire about reality, whether in the material world, or in the metaphysical world (the world of understood essences), or in the moral world (the realm of right and wrong, of duty, of conscience), there is an *absolute* value, not a *relative* one. As *philosophers*, we have no direct concern with phy-

sical essences and their material characteristics and processes; we leave the question of *physical relativity* to the discussion of physicists and mathematicians. But we must, in the name of truth, and on the basis of reality in being, take a definite stand against the intellectually and morally ruinous theories of *relative truth* and *relative morality* which are much in fashion today. The question of such relativity has full discussion in Criteriology and in Ethics. But we must make passing mention of it here. On the intellectual side, the relativist holds that what is true here and now is not necessarily or absolutely true, so that it must be true for all men of all times; but it might have been false in the past, or may turn false in future, or may be false now in other places than this world we know. In a word, the relativist holds to the dictum *truth changes*. Against him we might marshal a list of crushing arguments, and it is the duty of the criterialogist to do so. Here it will suffice to answer him quite simply, to condemn him out of his own mouth, to show that he proposes a self-contradictory doctrine, and so stultifies himself, and is unworthy of a serious hearing. When he says, "Truth changes," we may upset him completely by asking, "Is that true?" For, if his statement be true, then his doctrine is itself an unstable, unreliable, changing theory, and is therefore inadmissible.—The relativist in *moral* matters says that nothing is absolutely right

or wrong, good or bad, but that the moral quality (goodness or badness) of any human activity is determined by its relation to the times, or to the current needs of industrial or social groups, or to the existing stage of civilization and of human "progress." Our own American philosopher, William James (1842-1910), held such a relativist theory in regard to both truth and morality. He taught that the test of truth and goodness is the "workableness" of a thing; a thing is true and good if "it works," if it meets the needs of the moment or of the circumstances. From the Greek word *pragma* (an act, a deed, a thing that works or is worked) the theory of James takes the name *Pragmatism*. We may say to the pragmatist, intellectual or moral, "How can you speak of a thing as true or good if you have no understanding of what truth and goodness mean in themselves and apart from all special circumstances? How do you know a thing is good *now*, or that it actually *works* for human weal, unless you know what *good* means itself?" Chesterton says that the relativist is a man engaged in looking for the comparative of a word of which he has forgotten the positive. He believes in things being made better, but he does not know what good means; he believes in progress, but he has no idea of a starting-point, or a direction, or a goal; he believes in change, but he does not admit the stable existence even of a thing that can be changed.

c) QUANTITY

Quantity is the accident which affects a bodily substance with extension of parts. It is called "an accident which spreads out a bodily substance so that it is part here part there" (*accidens extensivum substantiae corporeae in partes*). Quantity is not the bodily substance itself, but an accident which affects the bodily substance. It is a proper accident of actual bodies, and, in the order of nature, an actual body is never found without some quantity; but quantity is not the essential constituent of the body itself. We have seen that a bodily substance has *essential parts* or elements, viz., prime matter and substantial form. It is not of these parts that we speak when we say that quantity extends the parts of a body. We speak of integral parts; the parts that make up the body in its mensurable character, and not the parts that make it up in its essence. When, for instance, we speak of the quantity of a block of stone, we do not refer to the substantial elements which make this substance stone, but to the parts or elements which make it this *much*, this *amount*, this *bulk* of stone.

There are five notable properties or attributes of quantity: (1) It extends the body in a manner that may be called *internal*, without reference to the space which the body occupies, or the place in which it moves or reposes. It is this property which is the formal property, or even the constituent property and

the essence, of the accident called quantity. (2) It extends the body in an *external* manner so that its parts occupy space or place. (3) It makes the bodily parts *incompenetrable*, so that one is not precisely where another is. (4) It makes the bodily substance *divisible* because the extended parts, not compenetrating, are conceivably and really separable, one from another. (5) It renders the bodily substance *mensurable* or measurable, because parts that are divisible can be numbered and can be seen in relation to one another as equal or unequal.

Quantity properly so-called is referable only to bodies. By an extension of meaning it may be, and is, applied also to *material things which are not substances*. And, by analogy, it is predicable of even *non-material* or spiritual substances and accidents. Thus we speak of a number of apples, a quantity of time, an amount of virtue of learning, a number of angels. But quantity in the strict and proper meaning of the word is always *corporeal quantity, bodily quantity, mensurable quantity*, the quantity of a thing that has dimensions.

Quantity as corporeal is either a matter of *size* or a matter of *number*. Quantity of size is called *continuous quantity*; its parts are united; the line which marks the end of one part is the same identical line which marks the beginning of the next neighboring part. By reason of this quantity a body is said to have magnitude, size, bulk. Quantity of number is called

discrete quantity; its parts are severed, discrete, separated. These parts may be, indeed, more or less perfectly *contiguous* (one lying close to another, so that the line which marks the end of one part is *right against* the line which marks the beginning of the next neighboring part), but they are not continuous. The quantity of a grain of sugar is quantity of *size*, continuous quantity; but the quantity of a pound of sugar in a sack (the whole being regarded as one quantity) is discrete quantity; it is the quantity of a *number* of grains taken together. Other examples of continuous quantity: an apple, a horse, a man, a tree, a stone. Examples of discrete quantity: a peck of apples, a herd of horses, a group of men, a clump of trees, a pile of stones. Of the first examples we say that they are of such and such *size*; of the others, we say that they exist in such and such *number* (or *multitude*).

Continuous quantity is called *permanent* or *simultaneous* if its parts are all in existence together; if it is "all there" at once. Such is the quantity of a horse, a house, or a stone. Continuous quantity is called *successive* if its parts come into existence one after another, and are not all there together. Such is the quantity (so-called by extension of the literal meaning of the term) of time, or of movement, or of a speech. Time is a flowing thing; minute follows minute; and, as the harassed hero of the comic opera sings, "The months in succession come round, and you don't find two Mondays together." So with move-

ment ; it is a thing which goes through a course, makes a transit, proceeds from point of beginning to point of ending, and one element or "part" exists at a time, to be followed by others in turn, until the motion or movement is complete. So also with a speech ; it would doubtless be a convenience if we could have the multitudinous words of some orators thrown upon us in one instantaneous and shocking blast, but the rigorous rule of reality forbids that this kindly thing should be.

Some philosophers, like René Descartes (1596–1650), have thought that the essence of bodily substance is its quantity. This is untrue. Quantity, as we have already said, is an accident of bodily substance ; it is not the bodily substance itself. A drop of water is as truly the substance *water* as is the ocean ; which manifestly could not be if quantity or extension or amount were identified with the substance quantified.

In abstract thought and language we deal with corporeal quantity as *lines* (or distances), *surfaces* (or areas), or *volumes* (cubic content, extension, mass). But in the concrete, a corporeal quantity is always a cubic quantity ; it has always length, width, and thickness. The finest "line," drawn with the finest instrument, on the hardest surface, has manifest length ; but it has width also, though it be the millionth of an inch ; and the ink or graphite with which it is drawn lies upon the surface as a layer of bodily matter

with its thickness or depth, even though this be but the billionth of an inch in measurement.

d) ACTION, PASSION, MOTION

1. *Action* is an accident (or non-substantial reality) by virtue of which a cause produces an effect. It is not an ability or capacity to do something; this, as we have elsewhere seen, is a quality. It is the actual "getting to work," the "going into action" that we call the *accident of action* or *predicamental action*.

The action whereby God produces things out of nothing (*creation*) is not, strictly speaking, predicamental action, for God is not affected by anything accidental. Yet such are the limitations of speech, that we speak of *the creative action* of the Almighty. An action of creatures is always an effecting, a producing (not out of nothing, but out of something already existent), an operating, a functioning. This, inasmuch as it is the actual *doing* (and not the equipment or capacity for doing), is the predicamental *action* of which we here speak.

An action which produces a new substance is *generation*. And, since the production of a new substance is always the reduction or removal of another (or others), generation of one substance is the *corruption* of another (or others). Thus, the generation of water is the corruption of hydrogen and oxygen; the generation of living cells is the corruption of food. Genera-

tion and corruption are *instantaneous*, not *successive*. When the action is not productive (and corruptive) of substance, but of accidental form or forms, it is called *change* or *alteration*. Thus the action of fire upon a pail of water turns the water from cold to hot; this is *alteration*. Alteration is usually successive, that is, it proceeds by steps or stages. Thus, the water passes successively through the stages of cold, less cold, lukewarm, warm, hot.

Action which remains, in itself and in its main effect, within the being which produces it is *immanent action* (from Latin *in* and *manere* "to remain in"). All *vital* action (that is, *life* action: nutrition, growth, generation, sensation, appetite, locomotion, intellection, volition) is immanent, and all immanent action is vital. The growth of a plant has, indeed, outer effects; it is larger as it grows, and stands in different spatial relations to surrounding bodies. But this is a secondary effect of growth; growth *in itself and in its main effect* is in the plant, and stays in the plant, and perfects the plant. Non-immanent action is *transient* (from Latin *transiens* "going over"); that is, it is action which *goes over* from the being which produces it and has its main effect on something else. The action of sawing wood or hitting a ball is *transient*.

2. *Passion* is an accident (or non-substantial reality) by which a being is constituted in *the actual receiving* of action, the actual undergoing of action in

its effect. Action is actual *doing*; passion is actual *undergoing*. Passion is thus the complement of action; it is its opposite, indeed, but in the sense of a related opposite; an opposite which is also a term or goal.

3. *Motion* is a kind of composite view of action and passion. St. Thomas says that "inasmuch as motion proceeds from a *doer*, it is action; inasmuch as it affects what *undergoes* the doing, it is passion." Motion is any transit from potentiality to actuality; it is any going over from non-action to action, from non-undergoing to undergoing. *Motion* is a term which suggests to the ordinary mind a moving about of a body or of parts of a body. This is indeed motion, but it is not the only type of motion; this is merely *local* motion or *local* movement. But there is motion in generation, and in corruption, and in alteration. There is movement or motion from the state of being hydrogen and oxygen to the state of being water, and conversely, from the state of being water to the state of being hydrogen and oxygen. There is motion in the transit from hot to cold, from cold to hot; from virtuous to vile, from sinful to sinless. There is motion in quantitative growth (enlargement) or diminishment.

e) PLACE AND SPACE

I. *Place* is an accident which determines "where" a thing is. It is an accident of a body which is immediately, contiguously, surrounded by another bodily

substance; and it is determined by the whole outer surface of the body in its contact with the surrounding substance.

Consider a glass of wine. *Where* is the wine, the continuous quantity or volume in this amount called a glassful? There are several answers. The wine is in the glass; it is on the table, it is in the room, it is in the house, it is in this county, and so on. The surface of the inside of the glass is its *immediate external* place or its *proper* place. The other places (table, room, house, county, etc.) are the *mediate* external places or the *common* places, for other things than the glassful of wine are localized in these places. But the outer surface of the volume of wine itself may be regarded as a kind of container, a kind of film or skin which holds the volume of wine; and this is *the internal place* of the wine. Internal place is immovable. No matter where the glassful, the amount, of wine may be, its internal place remains the same; for considered as "self-contained," its content or cubic bulk is ever the same as long as it continues to be the identical amount of wine. Take another illustration. Think of a baseball flying through the air from the bat of a muscular athlete. The external place of the baseball is being constantly changed as long as the ball is in motion; but the internal place of the ball is not changed at all. For, as long as the ball remains the same bodily mass or volume, it is held within the same dimensions, or rather, it is the same in cubic

content ; its mass, considered as contained or enclosed by its own surfaces, is *its internal place*. Thus, internal place is immovable in the sense of *changeless*. The external place of the ball, that is, the *proper external place*, is determined at any given moment by the concave surface of the air which immediately surrounds the ball and touches its surface at every point. For, at any given moment of its flight (such moment being *statically* considered), the ball is completely enclosed by the concave surface of the immediately surrounding air; there is, so to speak, a hole in the air into which the ball fits perfectly; indeed it is the actual extension of the ball which displaces the air and causes this perfectly fitting envelope to exist. The hole, envelope, or concavity into which the ball perfectly fits,—no other substance coming between the ball and this concave surface,—is the *proper external place* of the ball. The *common external place* of the ball is, of course, the air (in general), the park, the neighborhood in which the park is located, the section of county, state, or territory in which the neighborhood is located, and so on. In most of our expressions of localization, that is, expressions concerning the place occupied by bodies, we indicate *common external place*. Such is the meaning of the following phrases: "In this room"; "On the desk"; "In our part of the country"; "In America"; "Right here on this spot"; "On the campus"; "In chapel."

How may a thing be *in a place*? How may it be

localized? How may it be said *to be present?* There are four chief ways in which a reality may be localized:

1. If the thing localized is a bodily substance with quantity it has *presence in a place*, or is *localized*, in the *literal and proper* sense of these expressions. A body is in a place (external and proper place) when its own dimensions are immediately circumscribed by the dimensions of surrounding surface. Just so the baseball of which we were speaking is literally and properly localized by the immediately surrounding air, the exactly-fitting pocket of air, the inner surface of which is co-dimensional with the outer surface of the baseball. Lay a coin on a sheet of paper and, with a finely sharpened pencil, draw a close-fitting circle around it. You have thus "written around" the coin, and the circle you have written or drawn indicates the location of the coin in so far as it has place *on the paper*. Now, the Latin *circumscriptum* means "written around." This term gives us the English phrase *circumscription*, or *circumscriptive location*. Circumscriptive location is what we call *location* in its literal and proper sense. And we say that all bodily substances are located, or are in their proper external places, *circumscriptively*. Only bodies can be present in a place circumscriptively. Yet, by figure of speech, by metaphor or analogy, we use the language of circumscription very frequently when we speak of non-bodily things. Thus we speak of the places of the

angels in heaven, and of the places left vacant by the rebel angels. Thus again we speak of a man's knowledge as something that is *in* him; our language seems to suggest that it is in him in somewhat the same manner as his heart or his liver is in him. But, of course, our language is metaphorical. Non-material things have no dimensions which can be co-dimensional with a containing surface, and hence they cannot literally be in a place *circumscriptively*.

2. If the thing localized is a *form* which gives actuality (existence) to a substance or accident, it is said to in-form such substance or accident, and *to be in that substance or accident* (i. e., to be *located* or *placed* there) *informatively*. Thus the substantial form of any material substance is said to be *in* that substance, or to be *located* in that substance, *informatively*. Thus the soul is said to be located in the body. Thus the character or quality of beauty is said to be *in* a beautiful face or scene.

3. If the thing localized is a working force, an acting power, it is said to be present *where it works* in a manner that is called *operative*; it is said to be present or to be placed *operatively*. There are two types of operative presence: (a) A creatural power, a finite power (*substantial*,—like the soul; or *accidental*,—like the power of seeing) can be present only in *one* subject at a time, and is definitely limited to that subject, and can function only there. It is thus said to be *definitively* present in the subject in which

it operates. Thus the human soul is said to be present in the body *operatively and definitively*; we have already seen that the soul is in the body *informatively*.

(b) The Infinite Power (that is, the Divine Essence Itself) is unlimited in itself, and therefore is unlimited in the field of its exercise. And so it is present everywhere; it is *ubiquitously* present (the term is from the Latin *ubique*, "everywhere"). Thus God (and God's power) is present everywhere *operatively and ubiquitously*; and, since God's power is identified with His Essence, His very Being, He is present everywhere in full essence or *essentially*.

4. The fourth mode of localization or presence (or *ubication*, as it is sometimes called; a term from the Latin *ubicatio* or "whereness") does not lie within the proper scope of a purely philosophical discussion, but we add it here for reasons of completeness. It is the mode of presence exemplified by Christ in the Holy Eucharist. This mode of presence is called *sacramental*, and it is defined as a presence wherein a located substance has place through the mediation of the dimensions of another substance, but without making these dimensions its own. Thus the substance of Christ is present under the appearances (and dimensions) of bread and wine, but the dimensions of the transubstantiated bread and wine are not the dimensions of Christ. Christ is present in a tiny host, not in miniature, not partially, but whole and entire

in the fulness of His mature humanity as well as in the fulness of His divinity. And, while the host we look upon is really Christ Himself, we cannot transfer the dimensions and other accidents of the host to Christ and say that Christ is small, or Christ is round, or Christ is white, or Christ is brittle. For Our Lord uses the extension and other accidents of the host as the "veil," so to speak, of His presence, but He does not make this extension and these other accidents His own extension and accidents. He is present in the Holy Eucharist *sacramentally*.

It may be asked whether one body can conceivably be present in two or more places at the same time, and also whether a plurality of bodies can conceivably be present simultaneously in one and the same place. The first question asks about the possibility of *multilocation*; the second inquires about the possibility of *compenetration*.

1. Multilocation of bodies is an absolute impossibility if the plural localization is conceived of as *circumscriptive* in all cases. For it is a contradiction in terms and in concepts to say that the same body can be *circumscriptively* present in two or more places at the same time. It is to say that a body is in one place, and measures its actual dimensions with the actual dimensions of that place, and, at the same time, *does not* measure its actual dimensions with that place

since it is in another place simultaneously, measuring up its dimensions with *that* place.⁴ Now, a self-contradiction cannot be actualized; what is self-contradictory is absolutely or metaphysically impossible; not even a miracle can bring it to actual being. However, it *is* conceivably possible (because it involves no self-contradiction) for a single body to be in one place *in one manner*, and in other places *in respectively distinct manners*. Thus, as we know by revelation and faith, Christ is present in each consecrated host, and in each part of each host, in a real and true and factual manner. His body, risen and ascended, is *circumscriptively* present only in heaven whither it has ascended; but it is *sacramentally* present in each consecrated particle of bread and of wine. A multiplied sacramental presence is not inconceivable, and hence, by a miracle, is a possibility. In a manner analogous to the sacramental presence, —without, however, involving the existence of a *sacrament* in the theological sense,—the loaves and fishes were multiplied for the comfort of the multi-

⁴ Certain notable scholastic philosophers do not agree that *circumscriptive* multilocation (that is, the presence of the one body *circumscriptively* in a plurality of places) is a self-contradiction and therefore a metaphysical impossibility. These say that the circumscriptive presence of a body in its place is a *secondary* effect of quantity, and depends upon external extension; therefore, just as external extension can be impeded or blocked out by a miracle, so equally it might be *multiplied* without involving a multiplication of the quantity of which it is the secondary effect. Such is the opinion of Scotus, Suarez, Franzelin, and others.

tudes who heard Our Lord's discourse in the desert. The loaves were not multiplied in the sense that new ones were made and added to the original store; no, the crowds were fed with the original few loaves. But the *presence* of these loaves was multiplied. Now, it was not their *circumscriptive* presence or location which was multiplied; that would have been, as we have just seen, an impossibility because a self-contradiction; it would have been *the presence* and the simultaneous *non-presence* of each loaf in each place of its use. Yet the measurements or dimensions which determine *circumscriptive* presence are not the substance of the body which has such presence, nor are these dimensions the essence of the accident called quantity; for circumscriptive presence is a matter of external location and of external extension, whereas the essence of quantity lies in the internal extension of the quantified bodily substance. Hence there is no intrinsic impossibility in the fact of each loaf being present circumscriptively in one place and, at the same time, being present in other places in a non-circumscriptive manner. Our examples of multilocation are instances of the miraculous and the supernatural; necessarily so, since, in the order of unaided nature, multilocation is unknown. But our doctrine is not dependent on the examples which illustrate its meaning. Nor is it any part of our purpose to prove the actuality of the miracles mentioned. Our only legitimate purpose in the present discussion is to show that multi-

location, according to different modes of presence, is not a manifest absurdity and a self-contradiction. The most that philosophy can prove is that such multilocation is not an intrinsic or absolute impossibility.

2. We have already seen that one of the natural properties of actual quantity is *incompenetrability*. This is a property by force of which the existence of one bodily substance in a place blocks out any other body from that place at that time. Since this is a *natural* property, or *physical* property, of quantity, there is no such thing as *compenetration* of bodies (that is, two or more bodies occupying the same place at the same time) in the order of nature. Therefore the natural order affords us no examples of compenetration. Water in a sponge is not compenetration; the water merely occupies the spaces between and among the sponge-fibers which are drawn apart by its action. Anything *porous* which admits another substance, merely draws aside its own parts to allow the admitted substance to occupy their former place. Still, though nature gives us no examples of true compenetration, there is no self-contradiction in the very idea of compenetration as a fact. Though we have no *physical* possibility of compenetration in bodies, we have *meta-physical* possibility, or *intrinsic* possibility of such compenetration. For a body blocks out another body from its place by reason of its external extension, its *extension in the place*, not by reason of its internal extension, its *extension in itself*. And it is internal

extension that is the essence of quantity. Hence there is nothing in the essence of quantity itself which requires that "blocking out" which makes compenetration naturally impossible. Therefore, a miracle could give us actual instances of compenetration. And, indeed, miracles have done so. Consider the entrance of Our Risen Lord into the upper chamber through the door that was closed and locked. Consider also His rising from the sealed tomb, and recall the fact that the great stone which closed the entrance of the sepulchre was not rolled back until *after* Our Lord had risen and was not there. Nor is it an objection to our point to say that the Lord's body was, after the Resurrection, a glorified body; for it was still *a true body*, despite the wondrous qualities that came to it with its glory. For two bodies to compenetrate, it would be, of course, requisite that at least one of them should have no *external*, but only *internal* extension at the moment of compenetration.

II. *Space* is usually thought of as a kind of container in which bodies are located and in which their movements take place. *Space* is not the same as *place*; rather, place is a portion of space, a definite part of space occupied by a bodily substance. The moment one thinks of a body, one thinks of its surroundings, its place; and the moment one thinks of two or more bodies, one thinks of *the relation of distance* between and among them, and this is a thought of *space*.

Real space is the relation of distance among actually existing bodies. It is coterminous or coextensive with the extension of such bodies. For in the "distance" which intervenes between and among actual bodies in the existing universe, there is a bodily medium. Nature abhors a vacuum, and no true vacuum (that is, no true interval of absolute *nothingness*) exists within the limits of the visible world. What we call a vacuum in our physical laboratories is not the absence of all bodily reality, but the absence of atmospheric air. We have all seen the experiment in which a ringing alarm-clock is placed under a glass bell from which the air is then pumped out. The sound of the alarm-gong ceases to be heard, although we still see the little hammer pounding busily away. We say that the alarm cannot be heard because it is ringing in a vacuum. But the fact is that under the glass bell is a mere absence of air which is required for the transmission of sound. But there is no absence of what used to be called "ether" under the bell; there is no complete vacuum or absence of all material media, else we should not even see the clock. Light is a material entity and needs a material medium to carry it; the ether through which the light-waves come to us is as bodily as air, as bodily as water, as bodily as steel. And therefore between our earth and the most distant star that sends its light to us there is a material medium which is continuous, and has no intervals of nothingness, no breaks of absolute vacuum.

Hence the whole of our known universe is a continuous series of bodies without breaks or vacuums. Now, conceive of this universe as enclosed in a vast container, like a gigantic sack or an immense balloon. The sack or balloon will represent the outside limits of our bodily universe; it will mark also the limits of *real space*. What is outside the sack? Nothingness. Yet we are forced by the limits of experience and of imagination to fancy this outer nothingness *as though it were* a continuation of real space. This fancied image of space is called *imaginary space*. If the mind reflects upon the fact that real space may actually extend on and on, beyond the limits of the known or visible universe; if one thinks, that is to say, of the *possible* extension of real space (not merely picturing it in fancy, but reflecting on the intellectual concept or *idea* of space) one is dealing with *ideal space*. These are the three types of space usually listed: *real space*, *imaginary space*, *ideal space*.

Real space is fundamentally a real entity. It is not a projection of mind. It is not an "innate form" which conditions our sentient knowledge, as Immanuel Kant (1724-1804) thought it was. Kant denied the real existence of both space and time, and made them into something that may be called the "shape" of the sensing-power. And just as a bottle will conform to its shape whatever is poured into it, so the sensing-power, taking in its findings (*phenomena*, Kant calls them), makes these conform to its "shape," and so

perceives them as occupying *space* and occurring in *time*. But, we repeat, space is fundamentally *real*. It is the real extension of existing bodies in our universe, without break or interval; it is "the unbroken series of coexisting bodies." And as this series is real, so space is real. Yet space means something more than a series of bodies with their extension. We *think of* this extended series of bodies *as a container* of bodily substances and of bodily movements. And so our mind makes its contribution to the concept of space. Thus space is fundamentally *real*, and formally *logical*. As the extension of real bodies, it is real; as the container of bodies and their movements, it is rational or logical. So we declare space to be an *ens rationis cum fundamento in re*, that is, a *logical entity with a foundation in reality*. Kant made space a purely logical entity. Isaac Newton made it a purely real entity. He said that, since God is eternal and infinite by His essence, He exists everywhere and endures always, and so *constitutes* space and time. Thus Newton made space so real that he turned it into Reality Itself, and fell into a kind of pantheism.⁵

⁵ Newton is not to be declared an out-and-out pantheist for this statement, since the statement is capable of interpretation that expresses truth. If he means that space may be used to *express some explanation* of God's immensity, that is, if God's immensity is to have some sort of expression *in terms of space*, he is not obviously wrong. Our minds are limited and cannot grasp the unlimited simply and adequately; we find it helpful in forming our true concept of God's immensity to envision Him as present in endless reaches of imaginary space; and, indeed,

Imaginary space is described by the philosopher Lepidi in a just (and priceless!) sentence: "Imaginary space is that measureless void and spacious nothingness which lies beyond the limits of this world, and is depicted in our fancy as though it were real space endlessly extended and wholly motionless." Now, even this imaginary space is more than a figment of fancy, for there is ground and justification for the imagination of such space in the *possibility* of space being indefinitely extended; in a word, imaginary space is grounded on *ideal* space.

You may say, "Beyond the limits of this universe we know, there may be countless other worlds, and they may be severed from this universe by a true vacuum on all sides. How then can you define real space as fundamentally identified with the *uninterrupted* series of coexisting bodies?" It is true that there may be other worlds not included in this unbroken series of bodies that we call our universe. There may be; the thing is *possible*. But the realm of possible extension is the realm of *ideal space*. Our definition of *real space* remains what it was.

Modern physicists are much concerned with the

He is present throughout the unlimited reach of all possible space. But if Newton *identifies* space with God's immensity (and his words seem to suggest this), then he is entirely wrong and pantheistic. For God's immensity, like all His attributes, is one and the same thing as His Divine Essence which is spiritual and indivisible and infinite. Space, on the contrary, is material and divisible, and consequently finite.

character of real space. Some of them have declared that our old conception of space is all wrong. We conceive of it as a thing of extension by three dimensions, length, width, thickness, or, as the physicists like to say, "up-down, right-left, forward-backward." But there are really four dimensions, and the fourth is *time* or "before-after." The world is a kind of series of situations, in which events take place, and stand related to other events, and the relations differ according to different points of view or "points of reference," and in the convergence of events in a "point of reference regarded as ultimate" we find the phenomenon called *matter*. This vague doctrine takes the reality, not only out of space, but out of bodily substance itself. It makes things consist in their relation to the viewpoint of an observer. Some such *relativity* is taught by Dr. Albert Einstein in our day.

f) TIME

Time is an accident (or non-substantial reality) which affects bodily things inasmuch as these have motion or movement which presents to the mind phases of *duration*, and of *before* and of *afterwards*. Aristotle called time "the number or enumeration of motion looked at from the standpoint of before and afterwards." The "number of motion" means "the measure of movements" or of the concrete items or moments of a *continuous* thing, in which the end of one moment is the beginning of the next following.

Space and time have this in common that they deal with quantities and parts, and that they are thought of as containers. Space, however, deals with permanent quantities, for its parts are all present at once, whereas time deals with successive quantity, for its parts are not all present at once but follow one another into being in a continuous series of moments. Further, space is thought of as a receptacle or container in a simple sense, whereas time is thought of as a *measuring* container which, so to speak, marks and measures the time-quantity as it successively moves through its scale.

In time we distinguish three elements, the *present* or the *now* which is an indivisible instant, the *past*, and the *future*. The *now* is indivisible, for if it be thought of as divided, it falls into three parts itself, one of which is not *now*, but *past*; another of which is not *now*, but future; and still the indivisible point (the *now*) lies *between*. The fundamental concept of time lies in *motion*, in movement from the past through the present to the future.

To define time is not easy, nay, strict definition is impossible. We are all like the great philosopher, St. Augustine, who said, "If nobody asks me (what time is), I know well enough; but if somebody asks me to explain it, I know not." But time may be described, if not essentially defined, in these terms: *Time is an extending or spreading-out which consists of an unbroken series of movements which succeed one an-*

other, and it is thought of as the container and measurer of these successions. Time therefore measures movements; and these are local movements, that is, movements from place to place, movements in space, and such movements affect bodies. Hence time, objectively considered, is an accident which has to do with moving *bodies*. More: the mind makes its contribution to the concept of time, and conceives it as a container and a measure of local movements. Therefore, time, inasmuch as it is based upon real movements in unbroken succession, is *real*; but inasmuch as it is conceived as a measure, it is *logical* or *rational* or *mental*. Time, therefore, is an *ens rationis cum fundamento in re*, that is, a *logical entity with a foundation in reality*.

A natural extension of the idea and terminology of time (which, as we have seen, deals literally and fundamentally with bodily movements as seen by the mind in terms of measurement) enables us to speak of times and moments with reference to things non-bodily and spiritual. So we time thoughts as well as visible events, and we apply the notion of time even to timelessness or eternity which we inadequately express in terms of duration or of time.

Here in the world movement is an inescapable fact which we notice from earliest childhood. It is inevitable that reasoning man, for his convenience and the seemingly conduct of social life, should avail himself of certain obvious and regularly recurrent move-

ments as a standard or fixed scale with which irregular and free movements, and indeed non-bodily activities, are brought into comparison. Of all the major movements, regularly recurrent in the world, that which we incorrectly call the movement of the sun is most obvious. It has come about quite logically therefore that this movement has become the standard, and has been itself marked off into sub-divisions convenient for man's purposes, and these determined by variously devised and gradually improved mechanical devices from burning candles and hour-glasses to sun-dials, clocks and watches. Yet all this measurement is not the constituent element of time, but is what we call *extrinsic time*. *Intrinsic* time is the actual duration of a real movement; extrinsic time is the ratio which this movement bears to a standard movement. Thus the movement of the sun (so-called) is in itself intrinsic; but, as applied to other things, as giving us, for example, a schedule of hours, minutes, and seconds, it is extrinsic; just as the length of a yard-stick which is intrinsic to the stick, is an extrinsic norm or measure of the cloth or other substance that is marked off in yards by its aid. Sometimes we use the terms *internal* and *external* time instead of *intrinsic* and *extrinsic* time. External or extrinsic time is distinguished into *general time* (such as solar time, or lunar time, or sidereal time), and *particular time* (such as the hours and moments marked by chronometer or wrist watch). Thus, "today" or "last year"

expresses general time; but "in ten minutes" or "at half-past three" expresses particular time.

In the foregoing paragraph we dealt with what is called *real* time. But time may also be *imaginary* and *ideal*. Ideal time is *possible* time; the mind, reflecting on the concept or *idea* of time, envisions it as extending unto indefinite reaches of duration. Imaginary time is based on ideal time inasmuch as imaginary time presupposes the *possibility* of extended duration; and fancy creates an image of an extended future which is not seen merely as a possibility but as a reality, which however is not actually there, at least as yet. When the poet says, "I looked into the future, far as human eye could see," he exemplifies imaginary time for us. So does the young collegian who writes the inevitable "class prophecy" and envisions John Jones '38 as a bald and belligerent boss in 1960, and Mary Smith '39 as a wise and wizened dean of something-or-other in 1955. Real time, however, is the actual duration of real events, and of this time (that which has actually been, and that which is actually to be) we have no present possession beyond the invisible instant called *now* which has become *past* even as we give it a name.

We reject the theory of Kant who denied real time and made time a form or determination or "shape" of the sensing-power. So too we deny the theory of Newton who made time one with the eternity of God. But in asserting the reality of time, we do not forget that

this reality is fundamental; the formal element,—that which gives us time *as such* or time *the measure*,—is the concept of the mind. Rightly did Aristotle say, “If there were no such thing as mind, there would be no such thing as time.”

With time we contrast timelessness or *eternity*. In the strict or absolute sense, eternity is duration without beginning, succession, or ending. Such eternity belongs only to the Infinite Being and is identified with His essence. Eternity in a less strict sense, is duration which had a beginning but which will have no ending; often this is called by the Latin term *aeviternum* or *aeviternitas* (and these words seem to have an affinity with our *aeon*, and with our expression “forever and for *aye*”). In this less strict sense, we speak of the eternity of the soul, and of the eternity of human happiness in heaven. We have used the term *duration* many times in our present study; perhaps it was unkind to do so without a definition or at least a description. It may suffice now to declare that *duration* means *continuance in being*. A reality which is completely and perfectly and necessarily in being is *eternal*. Such a being has all perfections boundlessly; certainly, it has the high perfection called *life*; and it endures no succession, no change or shadow of alteration. And therefore Boethius rightly defined eternity (in strict sense) as “The simultaneous, complete, and perfect possession of boundless life.”

Modern mathematicians and physicists are much

muddled about *time*. Many of them make it a dimension of matter or of space; many of them, viewing it so, call it *space-time*. With physical theories, vague or definite, we have no direct concern in this philosophical study. But we may say, in passing, that, while most modern science disregards (when it does not deny) the classical concept of *time the measure* which we have herein explained, it is not consistent, nor is it confidently satisfied, in its own physical interpretation of the fundamental reality called time. The same is true of *space* in modern science. Dampier-Whetham's *A History of Science* (1931) quotes (indirectly) Sir William Bragg as saying that the classical theory is in use among scientists on Mondays, Wednesdays, and Fridays, and the relativity theory on Tuesdays, Thursdays, and Saturdays. The learned treatise might have added that Sundays are reserved for the next theory to appear. But there is a thought in the fact that scientists who have no use for old *time the measure* are still content to speak his language and do business on "Mondays, Wednesdays, Saturdays."

SUMMARY OF THE ARTICLE

In this very lengthy Article on the important accidents we have learned much valuable ontological doctrine. We have defined and classified *quality*. We have learned the meaning of *relation*, and have studied

its elements, and its varieties. We have noted the fact that *truth* is never relative in the sense of changing, nor is *morality* relative in such a sense. We have studied *quantity*, and have found that its essence consists in *internal extension*, that is, in extension in the extended substance itself, not in *external extension*, that is, extension in a place. We have studied *action* and *passion* and *motion*. We have learned the meaning of *place*, both internal and external, and have found that a thing may be localized, or in a place, in ways that are various according to the variety of placeable reality; the modes of presence or of place discussed are: *circumscriptive*, *informative*, *operative*, and we added a word on the *sacramental* mode of presence. We have discussed the possibility of *multilocation* and *compenetration* of bodies. We have defined *space*, and have distinguished it as *real*, *imaginary*, and *ideal*. We have discussed *time* (also distinguished into *real*, *imaginary*, and *ideal*), and have contrasted it with *eternity*. We have found that both space and time are *rational or logical beings with a basis in reality*.

CHAPTER II

BEINGS IN THEIR CAUSES

The most important of relations is that of *causality*, that is, of the *dependency* of an effect upon its cause and of the *necessity* for finding adequate cause for existing effect. The recognition of this relation is a basic and indispensable requirement of reason in its work of interpreting the universe. Indeed, the principle of causality ranks close in importance to the first principles which are immediately derived from the concept of being. Philosophy, the highest achievement of unaided reason, is often described as “the science of ultimate causes.” *Rerum cognoscere causas*, to learn the causes of things; that is the function of the philosopher. For the philosopher seeks knowledge that is root-deep, and he wants the deepest roots. Therefore the study of ultimate causes is his proper employment; when he knows things in their ultimate causes, he comes close to knowing all that is knowable about them. It is our duty, therefore, in this treatise on ontology, which is the very heart of philosophy, to devote special study to the question of causes; we cannot know *being* thoroughly, unless we view beings in their causes. In the present Chapter we seek to discharge this duty. The Chapter is divided into three Articles, as follows:

Article 1. Causes and Causality in General

Article 2. Intrinsic Causes

Article 3. Extrinsic Causes

ARTICLE I. CAUSES AND CAUSALITY IN GENERAL

- a) Meaning of Principle
- b) Meaning of Cause
- c) Classification of Causes

a) MEANING OF PRINCIPLE

We must define *principle* before we define *cause*, for cause stands to principle as species to genus, that is, a cause is a special kind of principle. Now a principle, in its widest meaning, is defined as *that from which anything proceeds or takes its rise in any manner whatever*.

There are many types of principles, but every one of them comes under the definition just given. There are, for example, *intellectual* and *moral* principles, that is, basic truths which serve to guide the mind to further knowledge, or the will to action. The axioms of geometry, for instance, are principles; in their guiding light the mathematician proceeds as he develops the whole of his science. The Ten Commandments are moral principles; they give directions which serve as the starting-point and the source of proper conduct. Every science, every art, every practical system of action, has its principles. The lad in manual training class learns the principles of carpentry, or of some other mechanical art; the law student learns the principles of jurisprudence; the medical student learns the principles of anatomy and therapeutics; even the little girl, learning to sew under the patient direction of a devoted mother, is learning *principles*, that is to say, first facts and truths which are valuable not only in themselves but as steps to further knowledge and skill. All conduct comes from moral principles, good or bad. Of a man whose conduct is

upright and admirable we say, "He is a man of principle," meaning, "His principles are good"; we rightly judge that his conduct comes from (proceeds from; takes its rise in) fixed convictions recognized as basic truths about what human conduct should be. Of the man whose conduct is evil, who is untrustworthy, we say, "He has no principle," meaning, "His principles are not good," "His conduct flows from (proceeds from; takes its rise in) convictions that are ignoble and unworthy." In all this we see the justice of our definition of *principle*: that from which anything proceeds or takes its rise in any manner whatever.

In a material and literal way, a principle is simply a beginning, a starting-point, or a source. Thus the dawn is the principle (that is, the beginning) of the day; thus the mountain spring is the principle (that is, the source) of the dashing stream.

An important point,—indeed, *the* important point, as is manifest from the definition,—about a principle, is that it *is prior*, or *has priority*, to what proceeds from it. There are various types of priority, among which the following are important: (a) *Priority of order*; the point is prior to the line, and is the principle of the line. (b) *Priority of time*,—called also *priority of succession*; dawn is prior to day; three o'clock is prior to four o'clock. (c) *Priority of nature*; the flame is prior to the illumination that comes from it, even though it is not prior in time. Flame and illumination come into existence at the same instant (al-

though, of course, it takes time for the illumination to spread abroad). (*d*) Priority of consequence; the working out of a theorem is prior to the proved conclusion; the conclusion proceeds from the demonstration and is its consequence.

A principle, then, in widest sense, is that from which anything proceeds, whether it has *being* therefrom, or is *made* thereof, or is *known* thereby. In a stricter sense, a principle is an entity (real or logical) which is *distinct* from, and *prior* to, and *intimately connected with*, that which proceeds from it.

b) MEANING OF CAUSE

A *cause*, as we have said, is a special kind of principle. It is a principle by force of which a thing is *produced*. Whatever contributes, *in any manner*, to the *producing* of a thing, is a *cause*. We notice at once that a cause is always a principle; we must notice also that a principle is not always a cause. The point is the principle of the line, but not its cause, unless in the special view of a line as *produced* by the transit of a point through space. The dawn is the principle of day, but not its cause. The starting-point is the principle of a race, but not the cause of the race. In other words, the idea of *principle* is generic and includes *cause* as a species; but principle has *non-cause* as its species too. Particular points of difference between the wider concept (*principle*) and the narrower or more special (*cause*) are these: (*a*) Between a cause

and what proceeds from it (*effect*) there must be a *real* distinction, whereas there is sometimes only a *logical* distinction between a principle and what proceeds from it. (*b*) Between a cause and its effect, there is an order of dependency; that is, effect *depends on* cause; such dependency is not always present in the case of what proceeds from a principle. When the lights are "dimmed out" in a theatre, the darkness follows upon, or proceeds from, the gradual fading of the illumination; but the darkness does not depend upon such gradual fading; it might have come suddenly by the simple snapping off of the electric current. (*c*) A cause is prior to its effect by a *real* priority, at least *of nature* if not *of time*. But a principle is often only *logically* prior to what proceeds from it. Thus the Divine Essence is the principle of the Divine Attributes, but is only logically prior to them (that is, prior in a special view of mind, since Essence and Attributes are really identified).

A *cause* must be carefully distinguish from a *reason*, from an *occasion*, and from a *condition*.

1. A *reason* is that which, in any manner, contributes to the *explanation* or the *understanding* of a thing. Smoke informs me that there is fire; it explains or makes me understand the presence of fire; but it is not the cause of fire. Everything (finite and infinite, substantial and accidental) has its *reason*, but not everything has its *cause*. Infinite Being is *uncaused*;

but it is not unknown or unexplained. Therefore, we have an important self-evident truth (called *the principle of sufficient reason*) which may be stated thus: *nothing exists without a sufficient reason for its existing*. But *the principle of causality* runs: *nothing is produced without a cause (or sum of causes) adequate to produce it*. Contrast the terms, *exists* and *is produced*. The existence of a thing demands an explanation, and this explanation (that is, this *reason*) is found either in the existing thing itself (and then it is uncaused, necessary, self-existent, infinite), or in something other than the existing thing (that is, in its *causes*). Here once more we see an important contrast, and we declare: *every cause is a reason, but not every reason is a cause*. In other words, when you know what causes a thing, you know something which explains the thing, at least in some measure; but you may know something about a reality without knowing what caused it, and you may know something about that Reality which has no causes because it is unproduced.

2. An *occasion* is that in the presence of which, or on the occurrence of which, something is done. Thus, an anti-New Dealer may find the picture of the President in his morning paper the *occasion* for unpleasant thoughts and, perhaps, unpleasant language. The picture is not the *cause* of the unpleasantness; it is the occasion. Every occasion has something of the character of a reason; but not every reason is an occasion.

Men are morally bound to avoid the occasions of sin. The occasions of sin, however, are not the causes of sin, for the cause of sin is the will of the sinner.

3. A *condition* is that which is required (by nature, by agreement, or by bias of mind) before a thing is done. A condition is more or less readily dispensable. If it is indispensable it is called a *conditio sine qua non*, that is, "a condition without the fulfillment of which (a certain thing) will not (be done)"; in other words, it is a *necessary* condition. You may agree to buy an article if the merchant will reduce his price; you place a *condition*. The actual causes of the transaction (if it comes off) are the wills of buyer and seller. Hence the condition referred to is not the cause of the sale. The fulfillment of the condition may indeed be a *reason* for buying, and the condition itself may be a *reason* for the merchant to reduce the price of the article. Usually a condition bears the character, directly or indirectly, of a reason; but not every reason is a condition. To illustrate further: The physician may say, "You'll not get well unless you take this medicine"; he expresses a condition, and indeed an indispensable condition. If you take the medicine, and it cures you, the medicine is the *cause* of your cure (one among several causes which include your will to take the medicine, the fact that the druggist is able to compound it, and so on); the medicine, duly taken and effective, explains your cure and is therefore a *reason* for your cure; and the taking of the medicine,

regarded abstractly, is the *condition* of your cure. Here we see how cause, reason, and condition may concur or even overlap *without, however, becoming identified*.

A cause, to repeat, is *that which contributes, in any manner whatever, to the producing of a thing*. Stress the word *producing*. A cause looks to *products*. And the thing produced by a cause is called its *effect*. Between cause and effect exists the relation called *causality*. For true causality to exist there must be: a *real distinction* between cause and effect; a true *dependence* of effect upon cause; a *priority of time or of nature* in the cause when viewed in conjunction with its effect.

c) CLASSIFICATION OF CAUSES

We here present Aristotle's catalogue of ultimate causes. We shall list the *four major causes*, and we shall mention certain *minor* causes. But before taking up the definition of these causes, we shall consider them as presented in a concrete example.

I have here before me an ivory crucifix. It is not a *necessary* thing (it is not a thing that *has* to exist, it has had existence *given* to it); it is a *contingent* thing, as all finite realities are. It is contingent upon, or dependent upon, the causes that produced it. For it is a *produced* reality; it is an *effect*. Let us see what a study of this crucifix has to tell us about its causes.

First of all, I notice that this crucifix is made of a substance called ivory. This substance has made a contribution to the effect (that is, to the crucifix), for without it the crucifix would not be here. Of course, some other substance might have been used, wood, or metal, or rubber, or plaster, or other material. But, in that case, the effect (this crucifix) would not have been precisely *this* effect that it is now; it might be an effect very similar to this, but the point is it would not have been *exactly this thing* that it is now. Well, the material out of which this bodily object is made is its *material cause*. The material cause has place in every substantial *bodily* effect. Spiritual creatures have their causes, but they have no *material* cause, since there is no bodiliness about them; there is no material out of which they are made. The material cause is called an *internal* or an *intrinsic* cause, since it is *right in* the effect, it is part and parcel with the effect; thus the bit of ivory which is here shaped into a crucifix is *right in* the product itself; it is *internal* or *intrinsic* to it. The first of the four major causes is called *the material cause*.

Secondly, I notice that the crucifix has been given a definite form or shape or image-value. This is a cause, for if the bit of ivory had been differently shaped it would not be a crucifix, or at least, not the precise crucifix it is now. Remember that a cause is what contributes *in any manner* to the being and the producing of the effect; and surely the outer *form* of

this crucifix has a lot to do with its being just what it is. Yet the outer form, the shape, the image, of the crucifix is an accidental thing, not substantial. The substance of which the crucifix is made would be this same substance if it were differently carved or shaped. But, as a fact, it *is* this determinate kind of substance that makes the crucifix, and no other; there is a *substantial* determinant (that is, *form*) of this effect as well as an accidental one; and any determinant of an effect has the character of cause. Therefore, in this crucifix, we notice *an accidental formal cause* (which gives it its shape, image-value); and we notice *a substantial formal cause* (which makes it a reality in this substance, and no other). We must not confuse *the material cause* with *the substantial formal cause* in studying this crucifix as an effect. The material cause is *ivory*, taken as a finished product, a completed thing, without reference to anything further. The substantial formal cause is *that which makes ivory what it is*, namely, ivory and not some other substance. And we must notice that there are several *accidental determinants* about the crucifix as an effect: it has not only a certain shape or image-value; it has also a certain size, a certain weight, a certain color, and so on, and all these points are determinations (that is, determinate facts; things which set or determine reality) of the crucifix; and if any one of them were different, the crucifix itself would be *so far* different. So the crucifix is actually determined in its being as

an effect by all of these accidental items or points of reality; each of them makes a contribution, however slight, to what the crucifix actually is. Therefore, each of these determinants is *an accidental formal cause* of the crucifix. Here we have discerned *the formal cause*, which is of two kinds, viz., *substantial* and *accidental*. The formal cause is part and parcel with the effect; it is *right in* the effect. That which makes ivory ivory is right here in the ivory crucifix and is the substantial formal cause of the crucifix; and that which makes this crucifix an image with this outline, this weight, this size, this color, etc., is, in each case, something that affects the crucifix in itself, in its real being and existence. Therefore, the formal cause, like the material cause, is *internal* or *intrinsic*.

Thirdly, I am well aware that this crucifix had a maker. Someone carved the bit of ivory into this particular form. Manifestly, this someone has made a notable contribution to the production of this effect, for without his activity the effect would not have been produced. The maker of a thing, the being by whose physical activity the thing is produced, is *the efficient cause* of the effect. This is the third in the list of major causes. And here we must notice two minor causes. (*a*) The artist (the efficient cause) who made this crucifix had in mind an image of the crucifix as he worked, and, indeed, before he started to make this crucifix. Perhaps he had another crucifix which he used as a pattern; perhaps he had a painting

of the Crucifixion which served him as a model. But whether the image was in his mind (or, more accurately, in his imagination), or was another crucifix, or a painting, it is certain that he had some model, some pattern, some *exemplar*. And this model or exemplar guided his activity in carving the crucifix, and thus made its contribution to the effect; it is therefore to be reckoned among the true causes of this effect. We call this cause an *exemplar-cause*, that is, a pattern-cause, a model-cause. It is a minor cause, for it *suberves* the action of the efficient cause which is a major cause. (b) The artist (efficient cause) who made this crucifix did not make it by a mere act of mind and will. Since he is finite, he is not one who has but to know and to will a thing, and it is there. He has to *use* things, and, by effort or labor or physical action, to make them into something else (substantially or accidentally). Therefore, the artist who made this crucifix had to use hands and tools in order to produce it. His efficient activity would have been balked and rendered null if he had not the requisite *instruments* for producing this effect. The tools that served the artist are *instrumental causes* of the crucifix; so too are those instruments which are naturally conjoined with the artist, his hands and his eyes and his steady nerves. These latter are natural instruments or instrumental causes; the tools are artificial or mechanical instruments or instrumental causes. The instrumental cause is a *minor* cause, subserving as it

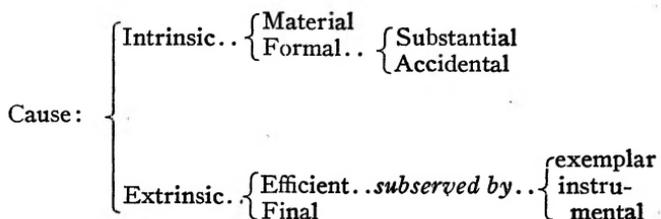
does the action of the major efficient cause.—The efficient cause is external to the effect; for manifestly, the man who made this crucifix is not part and parcel with the substance or the accidents of the crucifix itself; he is not *in* the crucifix. Hence the efficient cause is listed as an *external* or an *extrinsic* cause.

Fourthly, I realize from my consideration of this crucifix *as an effect* that the maker (the efficient cause) did not produce it aimlessly or without any reason whatever. There must have been something that served him as a reason, a goal, a purpose, an end-in-view, as he set about the work of making this crucifix. Perhaps he wished to express devotion; perhaps he wished to practise his art; perhaps he had an order for this crucifix and wanted the money he would receive for it; perhaps he had time on his hands and wished to be doing something to make it pass quickly; perhaps he thought that an ivory crucifix would be “a nice thing to have.” At all events, there was certainly something that accounts for the activity of the efficient cause in making this crucifix, and so accounts for the crucifix itself, that is, accounts for its producing, for its being here. Now, the reason, the end-in-view, the purpose, the aim, the goal, which the efficient cause has in producing the effect is called *the final cause* of the efficient activity and of the effect itself. The term comes from the Latin *finis* “end” (or, more precisely, from the adjective-form of that noun, *finalis* “having reference

or relation to an end"); the term "end" here means "end-in-view"; it means purpose; it means reason for acting. If the efficient cause is a creature, that is, a finite cause, the final cause is usually to be described as his *motive*, that is, the thing that *moves* him to exercise his efficient activity. But when we speak of God, the First Efficient Cause of all things, we must never speak of His *motive*, for God is not *moved* to produce an effect; God ever acts with the fullest, freest, most uninfluenced *choice*. Still, God, as Efficient Cause, has ever a *reason* and a *purpose* in His eternally decreed efficient activity; for God is Supreme Intelligence and Infinite Wisdom, and it is not wise in an intelligent being to act without reason or purpose. Therefore, *the final cause* is always an *end-in-view*, a *reason*, and a *purpose*; for creatures, it is usually a *motive* as well. In passing, to complete our comment on Divine Activity, we should notice that God is the First Efficient Cause of all things, and He is also their ultimate reason or purpose, for all creatures are made to manifest the objective and (in case of rational creatures) the formal glory of God. Hence it is correct to say: God is the First Efficient Cause and the Ultimate Final Cause of all things. A further fact to notice: the final cause is not a minor, but a *major* cause. It does not merely subserve the action of the efficient cause; it tends to produce the effect through the activity of the efficient cause; it does not merely guide the efficient cause in

its action as the exemplar-cause does, or make action physically possible as the instrumental cause does, but it accounts for the whole action, and the effect of the whole action, by its worth or value as a sufficient reason for the action. It is manifest that the final cause is, in creatures, an *extrinsic* cause. The ivory crucifix has in itself the *material* of which it is made (with its formally substantial character) and it has the precise accidental *forms* or determinants which make it just what it is in every way. But the purpose of the artist is not part and parcel with the crucifix; you cannot know for certain, from an examination of the crucifix itself, just what the final cause of the artist was.

We may sum up the results of our study of the crucifix as an effect by setting forth the following schema of causes:



SUMMARY OF THE ARTICLE

This Article has shown us the meaning of *principle*, and has given us detailed knowledge of the requirement of *priority* which belongs to a principle.

It has shown us various types of principle. Among these types we distinguished one which stands to principle as species to genus, and this is *cause*. We have defined *cause*, and have seen wherein it is distinguished from *reason*, *occasion*, and *condition*. We have learned that *causality* is the relation existing between cause and *effect*. We have classified causes according to Aristotle's list of four major causes, viz., *material*, *formal*, *efficient*, *final*. We have considered certain minor causes. We have seen that the major causes themselves fall into two classes, viz., *intrinsic* and *extrinsic* causes.

ARTICLE 2. INTRINSIC CAUSES

a) The Material Cause

b) The Formal Cause

a) THE MATERIAL CAUSE

A *material* cause is the bodily matter out of which a thing is made. As we have seen, only bodies have *material* cause. Spiritual substances (souls or angels) have no material in their make-up, and hence have no material cause.

A material cause is *matter*. Now, matter is distinguished as *primary matter* (or *prime matter*, as it is usually called) and *secondary matter*. Secondary matter (*materia secunda*) is a bodily substance as it exists in nature; it is a body constituted in its being and subject to accidental changes. Wax, wood, iron, a piece of coal, a twig snapped from a bush,—these

are examples of secondary matter. In a word, secondary matter is simply *a body*. Prime matter (*materia prima*) is the fundamental substrate of all bodies; it is a passive and indeterminate principle (existing only in actual bodies, and never alone or "by itself," for it is incapable of independent existence) which is the subject of substantial change.

The production of an *effect* is,—except in the case of *creation* which is an efficient activity that can be exercised only by God,—the production of *changed* reality. In our studies on change (*Book First, Chap. II, Art. 2, d*) we made a brief study of the basic constitution of all secondary matter, that is, of all bodily actuality. The student will do well to turn back now and reread the paragraphs indicated. When an effect is produced, this is because its causes concur in inducing a *change* from what was there formerly to what is now produced. And this change (this producing of *effect*) may lie in the *substantial* or the *accidental* order.

In our study of the crucifix as an effect we began with the consideration of the *secondary matter* out of which the crucifix was made. That is, we took ivory as the material; and the ivory existed in nature as ivory, as this kind of body, before it was shaped into a crucifix. Indeed the shaping of the crucifix brought only an *accidental change* to the ivory; it was changed in quantity, and in quality, and also in its relations of resemblance, for now it "looks like" something that it

did not resemble before; it has now an image-value which brings to mind the actual sufferings and death of Christ upon His cross. But the point is, the ivory was subjected to *accidental change* only. The ivory of the crucifix is the same substantial thing that it was before the crucifix was carved. Now, the subject of the change (that which *undergoes* the change) is *the material cause* of the effect which comes from the change. Hence ivory, a complete substance, a secondary substance, an actual body in nature, is *the material cause* of the crucifix, which is (as a crucifix, as an image, as a "shaping") an accidental thing, produced by accidental change.

Let us now consider the ivory of the crucifix in itself, and pay no attention to the shape into which the ivory is cut, or to its weight, or its color, or its value on the market, or its resemblance to other substances, or any other accidental thing. Let us consider the *substance* called ivory. Manifestly this ivory is a finite and hence a contingent thing; in other words, it is an *effect*. And it is a *bodily* effect. What then is *its* material cause? We notice that *as a body* ivory has a common essence and nature with all other bodies. There is no difference on the score of *bodiliness* (that is, the fact of being *body*) between ivory and lead, or silk, or a tree, or a dog, or a man. True, the bodies mentioned are essentially different in the *kind of bodies* they are, but they are not different in the *fact of being bodies*. For this common element which is thus discerned in

every bodily substance, there must be a real explanation and an accounting. The only satisfactory explanation of the point is one that has stood the test of over two thousand years ; it is the doctrine of *prime matter* as the substantial substrate of all existing bodies.

Now, prime matter is a substantial reality, but it is not a complete substance. It needs a co-substance before it can have actual existence. For its existence is *potential* only. Prime matter is purely indeterminate, purely potential. Indeed, it has been defined as *pure potentiality*. Any image we may use, any simile or analogy, is to be studied with caution, for it will necessarily be a very imperfect illustration of what we mean by truly *prime* or *primary* matter. Suppose for a moment that the whole bodily universe as we know it is annihilated, and that there exists a great mass of clay. Now, the Divine Power touches this clay, and instantly it is formed into all the different bodies of the universe again. The world is re-produced, just as it was before, with all kinds of individual things, and all sorts of different essences, and yet we see that all these bodily things were drawn out of, or shaped out of, the one original mass of clay. The clay will illustrate (most imperfectly) what we mean by a *common substrate of all bodies actually existing*. It will illustrate *prime matter*. Yet the illustration is very weak, for this reason : the clay is really a special *kind* of matter ; it has its own *existence* before the bodies are drawn out of it ; it is therefore not primary matter, but *secondary*

matter. For prime matter cannot exist itself ; it is no special *kind* of matter, for its kind comes to it with the substantial determination which sets up secondary matter (that is, with *substantial form*), and prime matter is wholly without determinations or determinateness. Yet it is not nothingness ; nor is it actual (that is, *existing*) being ; it is potential being. To say that it is *potential being* is to say that it is a capacity, a capability, a possibility, for receiving determining co-substances (that is, substantial forms) which, in each case of union with it, will produce a body, will produce secondary matter.

Let us attempt a further illustration. You take hydrogen and oxygen in proper proportions and combine the two gases under the action of a suitable agency and the result is *water*. You have produced a new substance which was not there before. You have not merely affected the gases *accidentally*, as you would by heating them, for example, or by compressing them, or by adding to their quantity or lessening it. No, you have produced a new substance which is different in its properties from the gases out of which you produced it. You have driven off the substantial determinants that made the gases hydrogen and oxygen ; you have brought in the determinant which makes this new substance water. Now, what is the field of this operation ? Whither have you driven the determinants which made the gases what they were ? Whence have you drawn the substantial determinant which makes this

substance water? The simple answer to each of the three questions is: *prime matter*. Prime matter is the common ground and substrate of all bodies. It is a capacity for becoming any sort of possible body, and when you fill this capacity in any given case, you *actualize* the potentiality of matter, and you say that the determinant (or substantial form) which sets the new substance in being is *educed from the potentiality of prime matter*. At the same moment in which the new substantial determinant or form is *educed* (and the new body thereby constituted as actual), the old substantial determinants disappear, and are no longer actual; they are said to be *reduced to the potentiality of prime matter*. Only *spiritual* forms (souls) are not thus educed and reduced; each is *created*.

Now, to revert to our original quest, what is the material cause of the substance called ivory? The answer is: prime matter. This is the material cause of all bodies considered in their basic substantiality.

The material cause of the crucifix (an accidental shaping of ivory) is *ivory*. The material cause of ivory as secondary matter, as an actual bodily substance, is *prime matter*.

b) THE FORMAL CAUSE

The words *form* and *formal* have a wide range of meaning. But there is this to be noted about them. In casual speech they suggest something rather unimportant, or something superficial, or something merely

accidental. Thus we speak of a formal dinner, or a formal dance, and we merely mean that these functions are undertaken with a kind of ceremony which consists mostly in the fact that men wear coats with tails. And the modern young woman speaks glowingly of a new "formal" when she means that she has a new frock of a certain pattern. The student speaks, with brave unconcern, of an approaching examination as a "mere matter of form" for one of his abilities. In flat contrast with this casual and conversational usage, philosophy employs the terms *form* and *formal* (and *formality*) as words of tremendous significance.

We may take as the best synonym for *form*, the word *determinant* (that is, a reality which *sets* and *determines* and *marks* a being). And for *formal*, the adjective-participle *determining* will serve us well.

A *formal* cause is therefore a *determining* cause. It is a cause which sets, determines, or marks the effect as *this precise kind of thing*. And the *kind* may be *substantial kind* or *accidental kind*.

When the artist took up a bit of ivory and carved it into the crucifix we have been considering, he bestowed upon it a new *form*. He gave it a new *determination* or *determinateness*; he bestowed upon it, by his efficient activity, a factor which is a *determinant* of what it now is. We have seen that this new *form* is an accidental form; for the substance called ivory was not re-determined, was not changed, was given no new form in itself as ivory. The substance remained ivory;

it remained substantially unchanged. Yet the accidental form which was given to the ivory as a determination, and which abides with it as a determinant, is a contributing factor in the effect called *this crucifix*. Had the ivory been shaped differently, by so much as one line, it would not have been precisely *this* crucifix which now it is, but, to the extent of that one line, it would have been *different* (otherwise *determined*). Hence, the accidental form of the crucifix has the nature of a true cause. It contributes in some manner to the actual being (the accidental being) of the effect. And whatever contributes, in any manner whatever, to the effect is a true *cause*. Whatever contributes, in any manner whatever, to the determining of what sort or kind of effect is produced, is a true *formal cause*. Whatever contributes, in the accidental order, to the determining of what kind the effect shall be, is a true *accidental formal cause*. Take a further illustration of this type of cause: A pail of hot water (and here we consider only the contents of the pail) has many *forms* or determinants, and each one of them is a formal cause. We notice that the water is hot, it is two quarts in amount, it is in the pail, it is on the stove, it is a thing undergoing the action of fire. Each of these points is a point of *reality*; each of them indicates a thing that is *there*, and that marks or determines the effect (that is, this particular water) in a real and special way. Each, then, is a *formal cause*, contributing its bit to the general character of the effect. It does not signify that

the heat will quickly pass out of the water once it is removed from the fire; it does not signify that the water will evaporate or be poured out and absorbed by the earth; it does not signify that the determinations or determinants of this water are fleeting and transitory things; it only matters that here and now, at this moment, the effect called *this water* is before us with these determinants and determinations, these *forms* in fact, and each of these forms has an influence upon *this effect* and helps to make it what it is. Thus each of the forms vindicates its true character as *an accidental formal cause*.

Come now to the study of the *substance* of the water. What makes this water water? As water it is not only a bodily substance, it is a bodily substance of a certain substantial *kind*. And something determines that kind. That which makes this body (water) a body,—not, indeed, an actual or existing body, but a thing with fundamental *bodiliness*,—is *prime matter*. But that substantial reality which has united with prime matter to constitute this body as an actual or existing body of the precise substantial kind is *the substantial form* of water. Prime matter is *indifferent* in itself; it is a capacity for receiving forms, and it can have in itself no tendencies or leanings towards one sort of form rather than another, for it does not have existence in itself and hence can have no existent leanings or preferences. Therefore, any determination, determinateness, or determinant that we discern in a substance as

such is not from its prime matter, but has, so to speak, been imposed on prime matter by the substantial form. Similarly (in the *accidental* order) a bit of wax is quite indifferent in itself towards the images or seals that may be impressed on it; it takes what comes; and when you find wax impressed with a certain seal, you know that the seal has been imposed upon, and pressed upon, the wax. Something *not* this wax has bestowed a determination and a determinant. So in the substantial order, when you find a body existing (or *actual*), you know that its actuality was bestowed upon it, was imposed or impressed upon it, and not externally like the impression of a seal on wax, but fundamentally and intrinsically in a manner that puts the matter itself into *actual existence as this actual substance*. We call this substantial determination and determinant by the name *substantial form*. And when we view an existing body as an effect, we say that the substantial form determines this effect in its substantial character as an *existing body* and an existing body of *this substantial kind and no other*. In this view, the substantial form is *the substantial formal cause*.

Matter and form are true causes. They contribute to the production of the effect in its existence and in its essence. They are intrinsic causes, for they *constitute* the effect; they are *right in* the effect. The *causality* of matter is not an active causality, for matter (that is, prime matter) has no existence *of its own* in which it could exercise causality, and even secondary

matter (that is, actually existing bodily substance) is of its nature inert and exercises activities by capacities which are *forms*. The causality of matter is *receptive causality*; it is capable of receiving forms, first the substantial form, and through it accidental forms. The causality of the form is an active or *actualizing causality*, for form unites with matter and in-forms it, thus setting up the substance in actual and determinate being. Even accidental forms in-form the bodies which they affect or qualify, and so actualize the body as this *kind* of body in its accidental aspects.

SUMMARY OF THE ARTICLE

In this short Article we have made a detailed study of *material* and *formal* cause. We have found that the material cause, which has place only in bodily reality, is the matter out of which an effect is made. If the effect is in itself a substance, its material cause is *prime matter*, the common and indeterminate substrate of all bodies. If the effect is in itself an accident, its material cause is the *secondary matter*, the actual bodily substance in which the accidental effect takes place or has its being. We have learned that the formal cause is a *determining* cause, that it determines the *kind* of thing the effect is, whether this be substantial kind or accidental kind. The formal cause which determines what substantial kind the effect is, is *the substantial form* of the substance-effect. The formal cause which deter-

for God who produces all effects. This doctrine of *occasionalism* was known as early as the 12th century, but had its most noted defender in Nicole Malebranche in the 17th and early 18th century. John Locke (1632–1704) and David Hume (1711–1776) and the *sensists* (who will accept no testimony but such as is furnished by the senses), and the *positivists* (who are much at one with the sensists, and demand the positive evidence of sentient experience for what they will accept) deny the existence of true efficient causes in the world. The sensists reduce efficient causality to a *succession of events*, denying the intimate connection of dependency of effect on cause. The positivists rule the whole question out of court, for they say that efficient causality is a metaphysical concept purely subjective in character (which means, practically, that it is a figment of fancy) and has no place in the domain of positive science.

Against all these theorists we assert the reality of efficient causality in the world around us. We declare that finite beings, creatures, are true efficient causes. We do not say that causality can be investigated *in itself* with the aid of microscope or chemical retort; we are willing to admit that it is a thing recognized by the mind, and not by the senses; but we declare that it is a thing which is really *there*. We do not assert that creatures are self-existent and self-sufficient in their activity as true efficient causes; no, we admit that they have been produced, they are effects, and they have

been equipped by their own Efficient Cause (their Creator) with powers for efficient activity, and they are maintained in being and in function as they use these powers. But given existence, given powers, given God's preserving and concurring activity with His creatures, we declare that creatures are true efficient causes, and that true efficient causality exists, demonstrably, in this world of ours.

It would be a bold man, not to say a blind one, who should deny that the world exhibits to us a most astounding arrangement or order, and a most evident purpose. Who will deny that in the tiny tree or in the new-hatched bird there is a remarkable arrangement and balance of parts? Who does not know that these parts, while most various and diverse in structure and function, all work together in a magnificent harmony of *order* which is for the *benefit of the whole organism*? We need not look at the magnificent order of the starry heavens, or study the accurate revolutions of the earth, to see order, harmony, balance, and purpose. We may see it in a blade of grass, in a flowing stream. We may find it in the beating of a heart and in the digesting of a dinner. It is everywhere. Things are arranged; things serve an end or purpose and their elements are arranged to achieve it. Now, if God is the sole Efficient Cause (as He is undoubtedly the First Efficient Cause, and the All-necessary Efficient Cause) what is the meaning of the complex structures of creatures? Why should God make the eye if it is not required, since

He does the seeing? Deny efficient causality to creatures, and you make nonsense of the beautiful order and purpose exhibited by the bodily world. And the mind of normal man refuses to make nonsense of what is so obviously meaningful, so significant, so beautiful, so important. *Securus judicat orbis terrarum*; the whole human race does not go wrong on its reasoned conclusions from manifest data. It never has, not even when everybody (or nearly everybody) thought that the sun actually rises each morning, and that the earth is motionless and more or less flat. For this was a surface-judgment on mere appearances, and men soon got beneath the surface and corrected the judgment. What we speak of now is no surface-judgment, no snap-decision on the nature of things, arrived at from appearances. This thing has been found to work out; it checks with experience; it meets the requirements of mind. The sensist who denies the connection between cause and effect, and reduces this to a mere succession of events, would have a hard time explaining his activity of putting food into his mouth to appease hunger. He cannot admit that the action has anything to do with *causing* the appeasement of his appetite. And surely, since it is an action in his own control, he might refuse to allow this charming succession to take place; but, for some opaque reason, he doesn't. The positivist, who brushes efficient causality aside as a metaphysical dream of no scientific significance, will find it difficult to explain his position; for

surely his reasons for his position are not items in the domain of positive science; his thoughts, judgments, arguments, are suprasensibile themselves, and belong to the realm of what he calls metaphysics, and are therefore valueless to himself, and presumably to others. Besides, were the positivist to argue with us, to "work upon us" to try to make converts of us, he would be engaging in an activity which looks alarmingly like the causality which he denies; for he wants to *cause* us to agree with him, to *cause* us to see the reasonableness (if any) of his position. Those who deny efficient causality to creatures in the world around us, inevitably tie themselves into contradictions.

Deny efficient causality to creatures, and you deny the order and purpose manifest in things. Deny this causality, and you stultify yourself by self-contradiction. Nay more: deny this causality, and you upset all human responsibility and all morality. For human responsibility, and morality, are based upon the freedom of choice (or free-will) which makes man the master of his deliberate and reasoned activity,—which makes man, in fact, *the cause* of his knowing and deliberate acts. But if man is not a true cause, then he is not the cause of his acts; then he is not free; then he is not responsible; then there is no use in laying down laws or in appealing to the moral code. Now, if anything is certain, the fact that a normal man is responsible is certain. In spite of theorists who have denied this patent fact, the world goes on recognizing

it as the most evident of things. And even the determinist (who denies free-will and responsibility) forgets his theory when someone steals his silver spoons, and appeals to the police to catch the thief and punish him. Which is evident folly, if the thief be not the responsible and true cause of his actions. It is manifestly absurd to deny human responsibility and to deny all moral obligations; and in the same measure it is absurd to deny efficient causality to creatures.

Another point. Deny efficient causality to creatures, and you put a bomb under every laboratory in the world. Science goes up in fragments and in a reek of smoke. For all science begins with the action of the senses upon bodily reality around us, and from that point it ascends, by mental abstraction, to general or universal truths. The biologist tells us about the amoeba, but he has never seen the amoeba; he has seen only some of the little things; but *the* amoeba is an abstraction. The chemist tells us the constitution of water, but he has never seen water; he has merely seen this or that quantity of water; *water as such* or *water in general* (and it is of this that he speaks) is an abstraction of mind. The mathematician tells us the properties of the circle; but he has only dealt with some few illustrations of circle. Circle as such can be understood, but it cannot be sensed. Now this knowledge of mind, this making of abstractions, this recognizing of universal or general truths, is the whole sum and substance of science, even of the most positivistic and

sensistic of sciences. But of what value is the knowledge or science derived in last analysis from the findings of sense, if sense-objects cannot *act efficiently* upon our senses and thus cause us to know them?

We must conclude,—reason and experience leave us no alternative,—that creatures are true efficient causes, and that they exercise causality in this bodily world.

We distinguish many types of efficient causes. The following are important :

1. *Primary-secondary*. God is the sole First or Primary Efficient Cause, for the definition of primary efficient cause is this : a cause which is wholly independent of other things ; a cause which has, in no sense, a cause of its own. Creatures are *secondary* efficient causes ; they depend upon the First Cause for their existence and their equipment and their function.

2. *Principal-instrumental*. The *principal* efficient cause exercises its own activity with the aid of another cause which subserves that activity. The writer, for example, exercises his activity with the aid of pen or pencil. The *instrumental* efficient cause operates (exercises its causality) under the movement and direction of a principal cause. The pen or pencil which serves the writer is an instrumental cause. Notice that *the whole effect* (in our example, the finished piece of writing) is attributable to both the principal cause and the instrumental cause, but in different respective ways. The writer wrote the whole letter ; so did the

pen. But the letter is, first and foremost, the writer's; as an expression of thought it must be attributed to the writer alone; no one would praise the pen for high sentiments or graceful phrasing. But the letter is attributable to the pen *as used by the writer*, and as having a fitness or suitability to serve the writer in the activity of writing. The instrument thus has its efficient causality in its disposition or fitness to serve a certain use, and this causality is actually exercised only under the transient application of the instrument to its use by the activity of the principal cause.

3. *Physical-moral*. A *physical* efficient cause is one that produces an effect by its own physical activity. A *moral* efficient cause (which is not an efficient cause *properly so called*, but as such by an extension of meaning) is one that exercises an influence on a free agent (that is, a free actor, doer, performer) by means of command, persuasion, invitation, force of example. The free agent who is moved to action by such influences is the *physical* efficient cause of the action; the one who exercises such influences over the physical cause is the *moral* efficient cause of the action.

4. *Per se—per accidens*. A *per se* efficient cause is one that tends by nature or intention to produce the effect that actually is produced. Fire is the *per se* efficient cause of light and heat; it tends by its nature to produce light and heat. A hunter who shoots a rabbit is the *per se* efficient cause of the killing, because he intends it.—A *per accidens* efficient cause is one that

produces an effect "by accident," since it is either not such a cause as naturally produces this effect, or the effect is not intended. A man drilling a well for water strikes oil; the drilling is not by nature calculated to bring up oil in each case, but, in this case, it does so *per accidens*. A man digging a grave uncovers buried treasure *per accidens*. A hunter shoots a dog, mistaking it for a rabbit; he is the *per accidens* cause of the killing of the dog, because he did not intend it.—The term *per se* means "of itself"; and the term *per accidens* means "by accident." A cause which of itself (that is, by its nature, or by the intention of a free agent) produces an effect is the *per se* cause of that effect; a cause which happens to produce an effect, although the cause is not naturally ordained to the producing of this effect, or,—in case of a free agent acting as physical or moral efficient cause,—is not intentionally directed to the producing of this effect, is the *per accidens*, or the *accidental* cause of the effect.

5. *Proximate—remote*. A *proximate* (or "next door") efficient cause admits no medium between itself and its effect. A *remote* (or "farther off") efficient cause has one or more mediate causes between itself and the effect. A thief is the *proximate* cause of the theft; the man who ordered the thief to steal, or showed him how to do it, is the *remote* cause. A disease may be the proximate cause of death; the contagion or infection which induced the disease is the remote cause. There is here an axiom of value for philosopher

and moralist: *causa causae est causa causati* which is translated literally as, "The cause of a cause is the cause of what the latter produces." We may translate the axiom freely thus, "The remote cause is a true contributor to the effect of the proximate cause." Of course, the degree or measure of the contribution will depend upon the actual influence which comes through to the ultimate effect from the remote cause. A moral efficient cause is always a remote cause of the ultimate effect. Our little Catechism lists the "nine ways of being accessory to another's sin," and therein presents for our consideration a series of moral and remote efficient causes, and indicates that responsibility for the ultimate effect rests upon the remote cause as well as upon the proximate cause: *causa causae est causa causati*. Another way of expressing the truth of this axiom (as touching free agents) is this: *qui facit per alium, facit per se*, "He who does a thing through an agent or proxy or representative, does it himself."

6. *Necessary—free*. A *necessary* cause is one that is compelled by nature to produce its effect when all conditions for it are fulfilled. Fire under dry chips is the necessary cause of flame. The sun is the necessary cause of daylight.—A *free* cause is one that can refrain from producing its effect when all conditions for it are fulfilled. A hungry man with appetizing food before him may still refuse to eat.

7. *Univocal—equivocal*. A *univocal* cause produces an effect of the identical species to which itself belongs.

Human parents are the univocal causes of their children.—An *equivocal* cause produces an effect which belongs to a different species than that to which the cause belongs. Thus, “April showers bring May flowers”; the human sculptor produces a non-human statue.

8. *Natural—Rational.* A *natural* efficient cause (called *agens per naturam*, that is, “Acting by its nature”) is any necessary cause in the physical order.—A *rational* efficient cause (called *agens per intellectum*, that is, “Acting with understanding”) is a free cause, a cause which acts with knowledge and free choice.

9. *In being—in becoming.* A cause *in being* (or *quantum ad esse*, “in so far as being is concerned”) is a *maintaining* cause, a cause which holds or keeps a thing in existence as such a thing. Thus solidity of matter and force of cohesion of particles keep a statue in existence as this statue, once it is carved out; these things are the causes of the statue *in being*; they are causes of the statue *quantum ad esse*.—A cause *in becoming* (or *quantum ad fieri*, “in so far as coming into existence is concerned”) is an *effecting* cause, an efficient cause which *brings* its effect into existence. The sculptor (aided by exemplar-cause and instrumental causes) is the cause which gives existence to the statue; he is the cause *in becoming*, or the cause *quantum ad fieri*, of the statue. He is not the cause of the statue *quantum ad esse* or *in being*, for the statue may still be in existence, *in esse*, when the sculptor has

been a thousand years in his grave. The sculptor *gives* the statue being; he is not required to *keep* it in being, to give it permanence.—Sometimes the cause *in becoming* is required to keep the effect permanent, and then it is also the cause *in being* of that effect. Thus, fire is necessary to *make* water hot and to *keep* water hot; it is the cause of heat both *in fieri* and *in esse*.

b) THE FINAL CAUSE

As we have seen, the term *final* comes from the Latin noun *finis*, and the adjective *finalis*, which mean, respectively, “end” and “having reference or relation to an end.” The “end” here indicated is “end-in-view,” purpose, goal, aim. A final cause is an end to be achieved which, so to speak, invites the efficient cause to get to work and achieve it. That which makes the production of an effect *desirable* is the final cause of that effect. A final cause is therefore defined as *that on account of which or for the sake of which a thing is done*.

The Greek word *telos* is the same in meaning as the Latin *finis*. Those with a preference for Greek derivatives (and these, by the way, are mostly the same people who decry the teaching of Greek as useless and old-fashioned) like to speak of the science of final causes or finality as *teleology*. And any explanation or argument which views a thing with reference to its end, purpose, or goal, is called *teleological*. We may mention in passing that the lovers of Greek terms like

to speak of the whole body of doctrine on causes as *aetiology*, a word which derives from the Greek *aitia* "cause," and *logos* "science." Be not amazed, therefore, if, when next you are ill, your physician discourses overpoweringly upon the aetiological factors of your indisposition. He means no harm. He is merely talking about what made you sick.

The fact that a thing is desirable makes it *good*; the fact that it is good makes things tend to it; the fact that things tend to it makes it an *end* or a *final cause* of the activity which seeks to attain it.

We notice a twofold tendency towards an end. A stream runs downhill, a magnet attracts iron filings, a tree has in it a drive towards maturity and fruitfulness. These things *execute* a tendency to an end without *knowing* anything about it. But when a dog goes after a bone; when a man instinctively reaches for a cup of water to slake his thirst, or plans to get a better job, or pays out money to get rid of debts, we have examples of the execution of tendency *with knowledge* of the desirability of the end. Thus there are in the world two types of tendency towards an end: *unknowing and natural* tendency, and *knowing* tendency. The latter type is itself of two kinds, tendency born of *sentient* knowledge of the end as desirable, and tendency born of *rational* or intellectual knowledge of the end as desirable.

The tendency of things towards an end is called *finality*. In addition to unknowing and knowing final-

ity, we discern finality that is *intrinsic* and finality that is *extrinsic*. Intrinsic finality is *in* things themselves and gives them a bent or bias or influence towards their end. Such is the finality observable in fire as it tends to consume dry wood; such is the tendency in a plant to grow to maturity. But extrinsic finality is something that affects things from outside. The tendency of the billiard ball to reach the pocket towards which it is driven is *extrinsic*; there is nothing in the ball itself which makes it tend to roll into that pocket. Intrinsic finality is an inner tendency of things; extrinsic finality is a direction given them by forces outside themselves, forces which do not meet any natural requirement of the things directed.

We have noticed that the existence of efficient causality has been denied or doubted by mistaken theorists; final causality has been even more wildly denied and more widely doubted. The *materialists* who deny the existence of everything but matter and its physical and chemical processes can find no such thing as final causality in their lists of physical powers and chemical elements, and so they deny such finality utterly. The *positivists* who reduce all activity in bodies to mechanical movements can see no necessity for asserting the existence of final causes. Descartes (1596–1650) and his followers make God the sole efficient cause of activities in the universe, and so deny *intrinsic* causality to creatures. Such theorists are unfortunate; they wed themselves to a scheme or

a philosophy, and then force reality to meet the requirements of the scheme. They cut heads to fit hats. Certain modern scientists of name follow this system.

Against these theorists stand the solid body of human common sense, the facts of universal experience, and the clear reasoning of the greatest philosophers. With St. Augustine, St. Thomas Aquinas, and the scholastics generally, we assert as true the ancient doctrine of Aristotle that creatures tend to their ends, and ultimately to a last end, by a true intrinsic finality, whether it be executed knowingly or unknowingly.

There is an old saying, *omne agens agit propter finem* "Everything that acts, acts on account of an end." The statement is not difficult to prove. For things that act have a determinate way of acting and tend steadily to produce determinate effects. The apple-tree has a way of producing apples, the pear-tree produces pears. In their respective manifestation of the glory of God, the trees never "change pulpits." The most positivistic of scientists relies on this *constancy of nature* in all his investigations and findings and conclusions. Now, this constancy, this determinateness of natural agents (that is, actors, doers, performers, active powers) in the producing of effects is plain evidence that the producing of such effects is *what they are for*. For the producing of such effects there is in the agents an inner drive, force, energy, power,—call it what you will,—which is

neither more nor less than *a tendency towards an end*. The agents act in conformity with that tendency. In other words, they "act on account of an end"; they exhibit *finality* in their action; they manifest the existence of an end to be achieved, which is a *final cause* of their activity. Notice that the tendency of natural agents to produce determinate and constant effects is an inner tendency, an *intrinsic* finality. Therefore we declare that the commonest experience acquaints us with the fact that things in the world about us tend to their ends by a true intrinsic finality. St. Thomas says, "If the agent were not determined to the producing of a certain effect, it would not produce *this* effect rather than *that*." If the apple-tree were subject to no determinateness in activity, it would produce pears as readily as apples, or water-melons, or strawberries, or all sorts of fruit together. St. Thomas goes on, "For an agent to produce a determinate effect, it must be itself determined to something certain which has the character of an *end*."

As for knowing agents,—that is, animals and men,—the case for finality is, as the detective stories say, "open and shut"; it is manifest. Animals are guided by instinctive knowledge towards certain activities and objects as desirable; in other words, they act towards *ends*; they exhibit intrinsic finality; they manifest to us the existence of *final causes*. And man, in many of his activities, proposes to himself the end he hopes to achieve; he *intends* an end knowingly and

willingly. Of course, animals and men are subject to many determinate activities which are uninfluenced by knowledge, but which proceed to their ends by natural execution; such, for instance, are the activities of growth, of heart action, of digestion.

Now, if every agent acts to an end, this end is either ultimate or it is a step in the direction of a further end; in other words, it is a definite end of the whole activity, or it is a *means* towards a remote end. For ends are connected and related one to another like steps in a stairway. A person ascending the stairs mounts the first step, not for its own sake, but in view of those higher up; and *all* of the steps are taken in turn, from first to last, in view of the upper floor the climber wishes to reach. Thus, in a series of ends, there is ever an *ultimate* end which gives meaning to the whole series. Hence, an agent, acting towards an end, is acting towards an ultimate end. In Ethics, a department of philosophy, we prove that *man*, in every deliberate and free act, acts towards an ultimate end which is the *summum bonum* or Supreme Good in the achievement of which he tends to attain supreme happiness.

We distinguish various types or classes of ends. The following are important:

1. *End of the act—end of the agent.* The end of the act, or of the work (*finis operis*), is that towards which a thing or an activity tends by its own nature.

The end *of the act* of burning up a book is the destruction of the book.—The end *of the agent* (*finis operantis*) is that which is intended by the free agent who exercises the activity or does the work. The end *of the agent* in the burning of a book may be the removal of bad literature from the reach of children; it may be the removal of damaging records; it may be the mere starting of a fire to fry bacon. Sometimes the two ends coincide, as, for example, when an alms is given to relieve poverty; for relief of poverty is its own natural effect, and it is that effect which the giver intends. Often, however, the end of the agent is different from the end of the work, as in the examples given above, and as in the case of the politician who gives alms so that he may win loyalty and votes. Even a politician, however, may have “mixed motives,” and may have as *partial* end the relief of poverty, and as *partial* end the securing of votes.

2. *Proximate—intermediate—ultimate.* These terms are self-explanatory. The youth who enters college, intending to follow a course in arts, and then go to a university to study medicine and become a physician, presents us with illustrations of all three ends. He enters college, and as he takes up the work of his freshman year, he intends to pass his examinations and be promoted to the sophomore class. That is his immediate purpose, his *proximate* end. Of course, even on his first day in college, he intends to pass through the sophomore class to the junior class,

and thence to the senior class, and thence to the university. These ends are, at the moment, not proximate but *remote*. The youth intends *ultimately* to be a physician. That is the *ultimate* end in the series here considered. The ultimate end is the most remote of the remote ends. The other remote ends lie between the proximate and the ultimate end, and hence they are called *intermediate*. Notice that all the ends except the ultimate end (holding our view strictly to this series, and considering the series definitely closed with the achievement of the doctor's degree) are willed and intended, not *for themselves*, but in view of their value as steps towards the ultimate end; in a word, proximate and intermediary ends are always *means* towards the ultimate end.

3. *Natural—supernatural*. A *natural* end can be attained by the exercise of natural powers; a *supernatural* end can be achieved only by the aid of God's grace. The doctor's degree which is the desire of the young collegian's heart, is a natural end. Eternal salvation is a supernatural end.

4. *The end which—the end for which—the end by which*. These ends are usually designated by Latin phrases, which are here given in the order of the English terms just named: *finis qui*; *finis cui*; *finis quo*. The youth wants the doctor's degree (this is the *finis qui*, the end *which* he intends); he wants it for his own use and purposes and benefit (this is the end *for which*, the *finis cui*); and he wills, as necessary inter-

mediate ends,—or *means*,—that which will win the degree, namely, work and study (these constitute the *finis quo*, the end *by* which). The first of these ends (*finis qui*) is the *objective end*, the object aimed at. The second (*finis cui*) is *subjective*; it is what the acting subject wants the object *for*. The third (*finis quo*) is the *formal end*; it is that by which the object is formally achieved, is achieved *as such*. To illustrate again: A man wants to go to heaven, that is, he wants the Supreme Good we call God (this is *the objective end*); he wants for himself the happiness of possessing the Supreme Good (this is his *subjective end*); and he wants to do what will get him the objective and subjective ends, namely, he wants to live in God's grace and exercise virtues (this is *the formal end*).

The causality of *the final cause* or *the end* consists in its attractiveness, its desirability,—its *good*, in a word. For the *real* or the *apparent* good exercises an influence upon an agent, draws him weakly or strongly, invites him to the attainment of itself. Thus the end makes a true contribution to the agent's activity (effect) and is a true cause or has true causality. St. Thomas says, "The effectiveness of an efficient cause consists in doing; the effectiveness of a final cause consists in attracting."

The *final cause* or *the end* is often called "the cause of causes." For it is the end which draws the efficient cause into action; it sets the goal; it indicates suita-

ble instrumental causes and exemplar-causes to aid the efficient cause in its work ; it brings the agent to the task of using the material cause and determining the formal cause of the effect.

As regards ends *intended* (that is, final causes rationally known and willed) we say, "The end is *first* in the order of intention, and *last* in the order of execution" ; *finis est primus in intentione, ultimus in executione*. The lad entering college to become a doctor has the doctor's degree and status before him as his intention ; it is the *first and foremost* influence in sending him to such a school and into such a course. But it is the *last* thing he achieves, in the particular series of ends which culminates in his graduation and degree. A man going upstairs intends to reach the second floor ; he intends that *first* or he would not put foot on even the lowest step ; but the arrival on the second floor is the *last* step of all : first in intention, last in attainment.

It is important for the philosopher and the moralist to ponder this axiom : "He who wills an end, wills the means necessary to achieve it" ; *qui vult finem, vult media*. The man who says he would like to live a better life but cannot, is not telling the truth. There are *means* (which are *intermediate ends* in the series that lead to a better life) which will serve him to achieve his end ; if he wills the end, let him will these means. If he does not will the means, but surrenders in the face of difficulties, we know he does not really

will the end itself. The converse of this axiom is also true: "He who wills what naturally tends to an end, wills the end itself." A man may keep questionable company; he may be in constant danger of moral calamity, and he may say that he doesn't will evil or sin. The simple reply to his statement is that he lies. He wills what will naturally bring sin, and therefore he wills the sin.

SUMMARY OF THE ARTICLE

In this Article we have defined *efficient cause* and have vindicated the existence of true efficient causes (and *efficient causality*) in the world about us, taking issue on the point with the *occasionalists*, *sensists*, and *positivists*. We have shown that denial of real efficient causality to creatures is in conflict with reason and experience, and is disastrous in its effect upon human responsibility and morality, and upon science. We have distinguished many classes of efficient causes. We have learned the meaning of *final cause* or *end*, and have shown that the existence of final causality is a demonstrable fact in the world. We have evidenced the dictum, *omne agens agit propter finem*. We have distinguished various types of ends or final causes, and have dwelt upon some practical truths which our study has made manifest.

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