Preface

As we've seen, Formal Logic sets forth the rules and laws governing the arrangement of our concepts in the syllogistic process of reasoning. And since we can't reason without judging, and since we can't judge without simple apprehension, Formal Logic is divided into three parts: The Logic of Simple Apprehension, or what pertains to simple apprehension, The Logic of Judgment, or what pertains to sentences and propositions, and The Logic of Reasoning, or what pertains to the syllogism.

So the first operation of the intellect, the first act which is elicited by our mind is called Simple Apprehension. It's the operation by which we 'perceive' or 'simply know' the nature of a thing in an abstract way; i.e., in a way which leaves behind all of that thing's peculiar, individual characteristics. And following our general method of procedure, we will start by asking what simple apprehension is in general (i.e., we will inquire into its definition); then we will examine it specifically by looking at all the different kinds of simple apprehension (i.e., we will examine its divisions). Now, the kinds of simple apprehension are varied according to the kinds of *concepts* produced by simple apprehension. Hence, our division of simple apprehension will be a division of the concept. Furthermore, since language is the external sign which is expressed to communicate our concepts to others, after we examine the concepts themselves, we will examine the signs by which they are communicated.¹

The Definition of Simple Apprehension

Simple apprehension is defined as the operation by which the intellect knows (i.e., cognizes, perceives, understands, etc.) some quiddity (i.e., essence) without affirming or denying anything about it. By this knowledge or apprehension the *concept* is produced.

Explanation of the Definition

So let's take that definition apart and look at each element. First, simple apprehension is an operation of the intellect. This is common to simple apprehension, judgment, and reasoning. All three of these acts are, as we said, operations by which the intellect gradually perfects itself in understanding reality. Second, by this operation the intellect perceives some *quiddity*. A quiddity is the essence or nature of a thing. It is anything that the intellect can understand in a thing and which manifests what the thing is. So 'whiteness', 'humanity', 'knowledge', etc. are all quiddities. Even the notion of 'thing' is a quiddity but in a most imperfect and vague manner. Third, when simple apprehension perceives this quiddity, it stops at that knowledge; it *does not affirm or deny anything about it*. In this way simple apprehension is distinguished from judgment (later on we will call this distinguishing characteristic the 'specific difference' between simple apprehension and reasoning). Judgment is always a uniting or a separating of two concepts, whereas simple apprehension is the conceptual knowledge which precedes this joining or dividing.² So I can conceive of an oak tree without affirming that 'oak trees are useful for building', or 'oak trees are tall', or even 'oak trees exist'. It's often very difficult to catch ourselves simply apprehending. Because our mind is always active and naturally developing itself, almost immediately after apprehending 'oak tree' we judge something about it; we associate the concept of 'oak tree' with other concepts almost straight away. Nevertheless, simple apprehension indeed exists. We can't affirm or deny 'tallness' of 'oak tree' unless we understood, at least in the most general way what these things were.

So, I've pointed out three parts of this definition to keep in mind: 1) simple apprehension is an intellectual operation; 2) by it the intellect knows a quiddity or essence; 3) nothing is affirmed or denied by it.³ Now, the second and third parts can be combined in the definition so that we might say: simple apprehension is

¹ In I Periherm., lect. 1.

² In III De Anima, Lect. 11.

³ In VI Meta., lect. 4, n. 1224, 1232.

the operation of the intellect by which *an indivisible* is perceived. That is, by simple apprehension we perceive only one unified essence, not several things composed or divided. A quiddity is a single unified concept. 'Man' or 'whiteness' or 'tree' is a single object of the mind and makes up a single idea or concept. But this doesn't mean that we only simply apprehend individual things. Otherwise, we would never understand the concept of 'forest' or 'football team'. A forest is not a single thing, but rather it is a conglomerate of many things. A forest is a collection of individual trees. A football team is a collection of players. Nevertheless, when we say 'forest' and conceive it by simple apprehension, we aren't simply apprehending the natures of all the individual kinds of trees. When we conceive 'football team' we aren't knowing and cognizing all the individual players that go into making up the team. Instead, we are understanding the individuals under an indivisible formality, or notion. A forest contains many individual trees, but I conceive them all as though they were a single thing; I conceive them all according to an indivisible unified notion-that of 'forest.' The object of apprehension in these cases is not the individual but all the individuals taken as a single whole. The notion of 'forest' is logically or conceptually one 'thing' or guiddity which can be understood, even though in reality it is made up of many individual things, each with its own quiddity. Recalling the distinction we made earlier of the material object and the formal object, the intellect simply apprehends many individual material objects under one common formal object, namely 'forest' or 'team'. When we look at a dog and conceive 'animal' for instance, we are considering the material object (i.e., the dog), under a particular formal aspect (i.e., its animality). And even though 'animal' is something which can pertain to any sensitive living thing, the concept of 'animal' is itself a single, unified concept. And when we conceive 'animal' we are neither joining it nor separating it from any other concept. That is, the formal object 'animal' is an indivisible notion, being neither joined nor separated from anything extrinsic to the concept of animal itself.⁴

This isn't to say that the concept cannot have several elements. When I say 'learned man' I'm referring to a single quiddity, a single essence—I'm not referring to several quiddities as I would be when saying 'a learned man is wise'. Nevertheless, 'learned man' has several elements which make it up; i.e., man as qualified by learning. If I were to say 'man is learned' then we have a different story. That would be a judgment. So the object of simple apprehension can actually be quite complex, yet it is conceived precisely as a single, undivided essence, a single quiddity. Not only is the concept of 'four-legged featherless robot fueled by vodka', the understanding of a single essence (though very complex) but even the concept 'every man who ever lived' is the concept of a single unified quiddity. In this last case every individual man who ever lived is conceived by the mind not individually—I don't consider one person then another then another and so one until I think about every man who ever existed—but they are apprehended by the mind under a unifying formality; namely, 'having lived'. Simple apprehension, then, is apparently not so simple.

So, simple apprehension abstracts some one intelligible formal object out of the many material objects that we know by the senses. We saw in the introduction to Philosophy that the mind cannot grasp all the intelligible characteristics of a thing at once. Instead, it has to separate each attribute one by one and examine them singly. And this process of separation, this abstraction of the intelligible notes, leaves behind all the singular traits of the individual. Thinking of 'man' abstracts from every particular man; from John and Peter and Mary and everyone else. It gives us a universal intelligible object that can be applied to an infinite number of individuals, be they real individuals or only imagined individuals. Now, existence is an individual trait. Not every man exists; some men *did* exist but are now dead. Some men will exist but don't yet. So the object of simple apprehension, by being abstracted from all individual aspects, also abstracts from the very act of existing. That is, when I conceive 'man' I don't necessarily conceive of man as existing. Hence, the concept of man is open to existence but this existence need not be realized in any particular object in order for me to have the concept. Take the dinosaurs. They are long gone. But I can still ponder the possibility that dinosaurs might one day walk the earth again. And I can do this because the concept of 'dinosaur' is 'existence-neutral', if you will. And when I conceive 'dinosaur', I neither conceive dinosaur as *actually* existing nor do I conceive dinosaur as *incapable* of existing. Existence, as an individual characteristic of those dinosaurs that lived so long ago, is not a

⁴ In II Periherm., lect. 3, n. 3; De Spirit. Creat., a.9, ad 6.; In I Post. Anal., lect. 1, n. 4;

necessary note of the concept 'dinosaur'. The concepts of the mind abstract from the notion of existence. Hence, we make a distinction between the *essence* of something and its *existence*. The essence is the object which is abstracted from individual characteristics and can be applied to all real and possible men; whereas existence is the act of an essence individuated in some particular—the *essence* of dinosaur has *existence* in this tyrannosaurus; the essence of man has existence in John.

But there is something very important to notice here. Abstraction means to separate one thing from another. And it can take place in two ways: *objectively* and *subjectively*. When I think 'dinosaur' I don't have to be thinking 'existence' at the same time. In fact, I can separate the two and consider one or the other. In the same way, I can think 'cake' without thinking of 'white cake' or 'brown cake' etc. I'm not saying that cake is not brown or white, but in simply apprehending the quiddity of cake I abstract from any consideration of its color. I'm not thinking 'cake is not white', I'm just not thinking about its color at all. This is called *objective abstraction*. In objective abstraction I am simply considering one intelligible object within the subject without thinking about any other object. So when I look at an oak tree and think 'brown' without thinking 'tall', I'm *not* thinking that an oak tree has color but not height. I'm simply *not thinking about height at all*. I'm abstracting one object—namely, the color—from the tree, which is the subject under consideration, and I'm not considering any other objects—neither the height nor the width nor the temperature nor the health nor anything else. I'm am simply *understanding* one object apart from the other. This is the kind of abstraction that we're talking about in the abstraction of simple apprehension.⁵

The case is different if I were to conceive of 'oak tree' precisely as something which excludes 'height' or 'browness'; that is, if I conceive of 'oak tree' as something which cannot possibly be brown then I have *subjective abstraction*. I'm not thinking about two different objects in the same subject as when I consider the color of cake apart from its sweetness, but I'm considering things which must exist in separate subjects. This kind of abstraction is had by *negative judgment*. For example, when I judge that man is not a stone, then I have an existential separation of two subjects. Man and stone can never be identified (that is, found together) in the same subject. This is not to conceive separately of two different objects, but to conceive of two things precisely as separate in reality.

Now, objective abstraction is always permissible for the mind as long as the two objects are intelligibly different. I can consider the whiteness of the cake without considering the sweetness of the cake and I haven't in any way falsified what I know. On the other hand, subjective abstraction is allowable only when the two notions are separated in reality. If I consider that this cake doesn't include whiteness in it when in fact the cake is white, then my mind is misrepresenting reality. The object of simple apprehension is never the whole of the thing under consideration; I don't know all about oak trees in a single intellectual glance. But considering the attributes of an oak tree one by one doesn't necessarily give me a false understanding of reality: partial knowledge is not false knowledge. If I consider the whiteness of the cake apart from its sweetness, I haven't misrepresented reality any more than the eyes have misrepresented it by seeing the cake apart from its taste. But if I judge that this cake exists without whiteness, then indeed I have distorted the way things are.

So, simple apprehension separates certain intelligible objects from the subject under consideration and it considers these abstracted objects one by one. Each of these objects provides the intellect with an understandable formality, such as 'whiteness' or 'height' or 'dogness' or 'humanity' etc.. And the intellect represents this formality within itself by means of the *concept*.

The Concept⁶

The concept is a representation constructed in the mind and by the mind in which we understand or perceive a thing. It's by means of our concepts or ideas that we understand the quiddity or nature of

⁵ I, q. 49, a. 3

⁶ In I Perih., lect. 3, n. 13; SCG, L. II, c. 75.

things. But remember that we don't understand everything about that quiddity or essence all at once. Let's make a few distinctions. First, there is the material object in reality (e.g., a dog). Second, there is the formal object which we perceive in the material things (e.g., the sight perceives the color, touch perceives softness, and the intellect knows 'dogness'). This formal object really is an aspect of the material thing (the color and softness really exists within the dog), but it is being considered separately by the intellect. Even though the material object is in reality a single, simple thing, it nevertheless offers many perfections or attributes according to which it can be considered by the intellect.⁷ So 'man' can be considered as 'animal' as 'rational' as 'species' etc. Each of these is a different formal object abiding in the same material object. And, if you'll recall, all of these distinctive objective aspects by which man is made known to us (i.e., by which we distinguish the concept of 'man' from all other concepts) are what we call the 'notes'. Notes are the objective characteristics from which our complete concepts are constructed. So if man is conceived as a rational animal, then animality and rationality are the notes that go into our concept of man. If man is conceived as a 'featherless bipedal animal' then 'featherlessness' 'bipedal' and 'animality' are the notes of the concept of man.

The Properties of the Concept: Comprehension and Extension

Now, the sum total of all the objective notes (i.e., the entire complex of intelligible aspects that we perceive in the thing) are what we call the *comprehension* of the concept. It is the collection of notes which constitute the concept. For example, the comprehension of man must include rational, animal, living, corporeal, and substance. The more notes that a concept has, the richer that concept will be. So if someone had a concept of man which only included animal and living, he would have a pretty vague idea of what man is. Take another example: parallelogram. The concept of parallelogram has a number of intelligibly distinct notes which make it up. It has the notes of plane figure, four sided, rectilinear, and parallel opposite sides. If someone had a concept of parallelogram which only included the note of 'plane figure' then his concept would be very general and imperfect. All that he would know is that a parallelogram is some kind of shape. He wouldn't even know that a parallelogram was different from a circle because a circle as well is a plane figure. To perfect his concept, he must discover the remaining characteristics of a parallelogram, gradually enriching his knowledge. The concept of square will be one which is even richer than that of parallelogram; besides plane figure, four sided, rectilinear, and parallel opposite sides, the perfect comprehension of square would also include the note of 'equilateral' and 'rectangular'; that is, all sides being equal and meeting at 90 degrees. So our concepts become more complex and richer the more objective notes that they contain. However, don't make the mistake of thinking that all of these notes exist separated from one another in reality. No one part of a square is a plane figure while another part is a parallelogram. Rather the whole square is a plane figure and the whole square is a parallelogram. It is, remember, the mind that separates these aspects (or formal objects) by abstraction. These notes may not be distinct in reality, but they are intelligibly distinct; i.e., they can be understood apart from the others. And the complete comprehension of our concepts is the sum total of all these notes taken together.

Now, when a note is added to a concept it makes that concept to be less and less general, and more and more specific. That is, the notes are related to each other as general to specific. Take two of the comprehensive notes of man, corporeal and living. Now, corporeal is a general note which applies to every physical substance: every substance which exists in physical reality is corporeal (i.e., it is a body). But not every substance in the physical world is alive. Rocks are not alive; chemicals are not alive, etc. So by adding the note of living to the note of corporeal, we are making the concept of man more specific, we are taking the general notion of corporeal and determining it to be a specific kind of corporeal thing; namely, a *living* corporeal thing. And we can even add the note of sentient to the comprehension and specify the concept further. It now becomes a *sentient* living corporeal thing. Each note further determines, perfects, and specifies the general and vague concept that we have of man.

⁷ I, q. 15, a. 1; SCG, L. I, c. 53; SCG, L. IV, c. 11.

Now, we very often are not aware of all these notes distinctly. Nevertheless, they are present in our concept and our concept is precisely the concept of this or that thing because of these notes—it's because of a difference in notes that the concept of man is different from the concept of dog. If there was no difference in the intelligible content of our concept of dog and the content of the concept of man, then we would conceive all men to be dogs and all dogs to be men. So all the notes are indeed contained in the concept, even if confusedly. One of the goals in Logic is to teach us how to spell out very clearly all the notes that should be present in a concept; we'll learn how to do this when we learn about definition. Defining, as we'll see, is the act of making explicit all the comprehensive notes which are contained in our concepts implicitly. In fact, all scientific investigation into the nature of a thing is to determine what notes always and everywhere pertain to it and what notes do not. All rational inquiry into the essence of a thing is a gradual building up of its intelligible notes until we have exhausted everything that can be known about it. So simple apprehension doesn't immediately pull out the entirety of a thing's essence; we don't abstract everything there is to know about something at a single glance. Our intellectual knowledge is at first very obscure. As babies we possess only the most basic notes within our concepts: ideas such as 'something' or 'body'. Little by little, our sense knowledge, and especially our memory, will help us to tell what observable traits in a thing always and everywhere pertain to this thing. Then we abstract the notion of that trait and include it in the comprehension. So at first children have only the simplest concept of their parents and so they call all men 'dad'. Slowly, they add notes which will help them understand what it means to be a father until they identify their father with only one particular male. Oftentimes, though, it is quite impossible to pull out every single comprehensive note; as we'll see, some things cannot be properly defined because they elude our minds.

Comprehensive notes are a bit like clues in a detective story. The fewer clues I have, the more suspects I have. So, if I have a concept which includes only the note of corporeal substance, then my concept can refer to any physical body. But if I add to this comprehension the note of living, then I've narrowed down the number of things that this concept can extend to. Now, it doesn't refer to every physical body, but only living physical bodies; i.e., plants and animals. The collection of things to which any given concept will apply is called the *extension* of the concept. You see, because the concept is abstracted from particulars it is universal. And as a universal concept it can apply to any number of singular things. So, the concept of man can be said of Joe, John, Mary, Peter, etc. All those subjects to which the concept applies is called its extension. The extension of plane figure would include circle, square, triangle, etc. And the extension applies not only to existing things, but to possible things a well. Man can be said of Sherlock Holmes even though he never really existed. Now, the fewer notes contained in the comprehension of concept the greater will be the extension of that concept. So if a concept contains only the note of *substance*, then it will pertain to every possible substance, including immaterial substances. If however the note of *material* is added to the note of substance, the we will have excluded immaterial realities from the extension; i.e., the concept can no longer be said of immaterial realities. Again, if we were to add the note of *living* to the comprehension, then the concept would apply to an even smaller multitude since it would exclude all inanimate things. So there is an inverse proportion between the richness of our concepts (i.e., the number of notes they contain) and the number of things to which they can apply. That is, there is an inverse proportion between comprehension and extension.

CONCEPT	COMPREHENSIVE NOTES								
Man	Substance	Material	Living	Sentient	Rational	Man			
Animal	Substance	Material	Living	Sentient	Brutes	Man			
Organism	Substance	Material	Living	Plants	Brutes	Man			
Body	Substance	Material	Inanimate bodies	Plants	Brutes	Man			

Take a look at the following at the following diagram to help you understand this:

Substance	Substance	Spirits	Inanimate bodies	Plants	Brutes	Man			
	EXTENSIVE SUBJECTS								

Scientific inquiry is a gradually adding up of all the notes in our concepts of reality. So originally it was thought that there were only four elements. But new properties (i.e., new notes) were discovered in various chemical elements that differentiated one element from another. From general and vague knowledge of elemental composition we came to clearly distinguish elements; we came to perfect our concepts of elemental reality. Slowly the table of the elements grew from four up to its present state. As children we didn't start out with a knowledge of the various types of birds. We would point to a bird and say 'bird'. We wouldn't point to a bird and say 'wood warbler', because our concept of bird included no notes that would distinguish a wood warbler from a mockingbird, or a mockingbird from a magpie. No, our original concept of bird was, comprehensively speaking, very pathetic. It perhaps contained the notes 'winged' and 'small'. The rest of the notes came only much later and after observing many different birds.

We shouldn't make the mistake, though, of thinking that all the comprehensive notes we pack into our concept are of equal value. Not everything we can say about a thing will perfect our knowledge of that thing's nature or quiddity. As we'll see later, some notes pertain to the comprehension essentially, while others non-essentially or accidentally. Having two-legs, for example, is certainly an attribute of man. Nevertheless, it isn't a note which pertains to him essentially; otherwise cutting off a leg would destroy his human nature. As we'll learn, science is only interested in what pertains to the essence or quiddity of a thing, not to any accidents or non-essential characteristics.

Now, all those subjects which fall into the extension of some concept are called inferiors. While the concept itself, together with all its comprehensive notes, is called the *superior*. So 'living being' is a superior and 'plants and animals' are the inferiors which fall under superior concept. A superior can be said of an inferior. Thus, 'animal' can be said of my dog, because she falls within the extension of 'animal'. This is also called *predication*; animal can be *predicated* of my dog; organism can be predicated of my son; substance can be predicated of every human being. We also call superiors 'logical wholes' while the inferiors are 'subjective parts'. So 'sentient being' is a logical whole and it may be divided into subjective parts of 'brute' and 'man'. Now, a logical whole is different than what is called an integral whole. Consequently, subjective parts are different than integral parts. An integral whole is physical composite which is really the sum total of all its parts. So the human body is really composed of a head, a chest, arms, legs, etc. And if these parts are separated the body is destroyed. A logical whole, on the other hand, is not the sum total of its parts. The concept of bird for example is not a concept that is arrived at by adding up all the various types of birds. In fact, even if there was only one type of bird, the concept 'bird' would not in any way be altered. Likewise, animal has for its subjective parts 'brute' and 'man'. But even if brutes didn't exist and man was the only animal, the concept of 'animal' wouldn't be cut in half; whereas if a circle is divided into two integral parts, the removal of one part would halve the circle. We don't get the concept of animal by adding together man and brute.

Furthermore, objects which are inferior to one concept may be superior to another. Animal is a logical whole in relation to the logical parts of brute and man—it is a superior. But in relation to 'living being' animal is an inferior; living being, or organism, is a superior which is divided into plant and animal as its logical parts. Singular things, however, cannot ever be superiors. Why? Because they have no extension. The nature of Peter can never be applied to Mary; that is, the particular concept we can form of Peter can never include Mary within itself.

Comprehension and extension are two examples of the logical properties that we mentioned in the introduction to Logic; they are *second intentions*. The extension of 'man' doesn't exist in John, rather it exists only insofar as John's human nature is conceived by my mind. John in reality doesn't have 'animal' in one part of himself and 'man' in another; its the intellect which separates these notes and

creates the comprehension. Likewise, John has no extension. 'Johness' can't be said of anything but John himself; he is a singular, incommunicable, 'un-predicatable' individual. The relation of the notes to each other as the constituent elements of our concept is a purely logical relationship. So in addition to the logical second intentions that we've already mentioned as example—noun, verb, subject, predicate, proposition, and so on—we must now include comprehension and extension. Neither of these has something exactly corresponding to them in reality. They are relations between formal objects that can be understood in the thing (comprehension) and relations between superior and inferior concepts (extension), and these relations exist only in the mind.

Furthermore, comprehension is the logical foundation for extension. That means comprehension has a kind of logical priority over extension; it is the number and type of comprehensive notes that determines the number of members within the extension. And an alteration in these notes will alter the extension. The comprehension of our concepts determines the extension of our concepts. In other words, extension is a *logical effect* of our comprehension.

One more point, the comprehensive notes given in the chart above are not the only comprehensive notes. 'Four-legged' might be a note that makes up your concept of dog; 'spiritual' might be a note that makes up your concept of man. And each of these notes will have its own extension: four-legged extends not only to dogs, but to elephants, to cats, even analogously to chairs and tables, etc. But some of these notes are essential or pertain to the very essence of the thing under consideration; while some are only accidental or incidental to the essence. So 'fat' is note that can extend to any given man who happens to be soggy around the midsection; but it isn't an essential note of the universal concept of 'man'. 'Fourlegged' isn't essential to the dog and hence isn't an essential note of our concept of dog; a dog can have three legs and still be a dog. The chart above only uses the notes of 'substance', 'material', 'living', etc. as *examples* of intelligible notes. Later when we deal with what are called the 'predicables' and the 'predicaments' we'll learn that the examples given in the chart are the most *perfect*, essential, and direct divisions of these concepts, but certainly not the only divisions. Furthermore, don't make the mistake of thinking that the notes in the chart above are *ultimate*, or that they can't be themselves broken up into further intelligible notes. 'Living' for example can be itself analyzed into various comprehensive notes which make up our concept of 'living'; e.g., 'self-moving' is a note that goes into the comprehension of 'living'. All of this will become much more clear when we deal with the predicables, and especially with what are called 'genus', 'species', 'difference', and the 'tree of Porphyry'. For now, just understand that each concept has distinct, intelligibly knowable elements, the sum total of which we call *comprehension*. While the sum total of members of which this concept can be said is called the *extension*. 'Fruit' has its own comprehensive notes different from what we've given above, and we might divide its extension into 'red fruit', 'green fruit', etc. Or we might divide its extension into 'sweet fruit', 'sour fruit', etc.

A Warning: The Concept and the Phantasm

To clear up any difficulties before we go on, a distinction must be made between the concept and what is called the *phantasm*. The phantasm is that sensible image that you have 'in' your head. It's caused by the imagination and it generally has some hazy sensible qualities. If you're thinking about 'man' for instance, your thought might be accompanied by a blurry image of a medium build individual with the outlines of a face and perhaps a hint of color. Most of the features are a bit unclear, but you definitely have the image of some individual in your head. This is most certainly not what we mean by the concept! This murky image is called the phantasm and it is the representation of a thing produced by the imagination. Now, the imagination is one of our internal senses; and, if you'll recall, sense knowledge is always of some particular thing, not the universal. So the phantasm is always an image or a conglomeration of images which represent some particular material thing, whereas the concept is in the intellect and can represent the universal. The phantasm is a sensible representation which is infinitely variable depending on what sense qualities you decide to include in it. The concept represents 'what' man is and is always the same. To prove that the phantasm and the concept are distinct, consider the following: you cannot imagine a chiliagon. And what on earth is a chiliagon? It's a thousand-sided plane figure. Now, you

understand what I mean by a thousand-sided plane figure: it's a two dimensional shape having 1000 sides. You can certainly conceive the concept; but I challenge you to picture it. You can't imagine exactly what it looks like, you can't form a representation of it in the imagination, nevertheless you have the concept. So you can separate the image from the idea. But things which are separable are distinct. Hence, the phantasm most assuredly is not the concept.

At this point, we've given a general overview of simple apprehension and its product: the concept. Now we will look at the division of the concept. And the concept can be considered in two ways: absolutely and according to what it is in itself, or in relation to other concepts (i.e., how two or more concepts are related to each other). So we will look at, first, the division of the concept in itself; and, second, the relation of several concepts among each other.

EXERCISES: Let's give you a little practice in recognizing comprehension and extension.

- 1. Which has greater extension, animal or man?
- 2. Which has more comprehensive notes, animal or man?
- 3. Which has greater extension, substance or plant?
- 4. Which has more comprehensive notes, substance or plant?
- 5. Which has greater extension, organism or body?
- 6. Which has more comprehensive notes, organism or body?
- 7. Give the comprehensive notes of man:
- 8. What do you comprehend of a person you see walking down the street?
- 9. What do you comprehend of Gandalf? (Remember our distinction between the concept and the phantasm)
- 10. What are some of the intelligible elements of dog?
- **11. And of mineral?**
- 12. By investigating reality what does the scientist seek to do with comprehensive notes?
- 13. What is the extension of substance?
- 14. And of animal?
- 15. And of man?
- 16. And of John Smith?
- 17. Of WHAT is extension the sum total?
- 18. Of WHAT is comprehension the sum total?
- 19. If you comprehend man, do you comprehend animal?
- 20. If you understand the quiddity of animal would you thereby understand the essence of man?
- 21. Arrange each of the following in the order of DECREASING extension:

- a. Substance, body, living being, coniferous, tree, fir
- b. Frenchman, European, man, Parisian
- c. Italian, European, Earthly, planetary, roman, northern
- 22. Explain why comprehension and extension are *logical* properties and not *physical* properties.
- 23. Give at least two examples of the extension of each of the following concepts: athlete, bird, school, horse, element, planet, nation, money, paper, vegetable.
- 24. Give, in whole or in part, the comprehension of each of the following concepts: the mosquito and the fly; the Secretary of State and the Secretary of Defense (and, yes, political satire is appreciated here); hydrogen and oxygen; the rose and the violet; the magazine and the newspaper; the circle and the square; red and blue; the house and the church; a gun and boxing gloves; an airplane and an automobile.