



# Comprehension and Extension

\_\_\_\_\_ **Introduction.** In the last chapter we explained what simple apprehension was. We said that it was an act by which the mind grasped the essence or meaning of a thing without affirming or denying anything about it. We explained how simple apprehension differed from sense perception and image, and that simple apprehension is different from judgment because simple apprehension does not affirm or deny anything about a concept, while judgment does.

In this chapter, we will discuss, not the *definition* of simple apprehension (since we have already done that), but the *properties* of simple apprehension.

The definition of something is an explanation of what it is. The properties of something are the things that distinguish it and help us to know how it differs from other things.

The two properties of simple apprehension are *comprehension* and *extension*.

\_\_\_\_\_ **Comprehension.** Some concepts (and remember, concept is just another word for simple apprehension) are simple, but some are complex.

In the last chapter, the example we used when we talked about simple apprehension was a chair. When we are asked what a chair is, we can simply say, “A structure of metal or wood designed for people to sit in.” The concept of a chair is a fairly simple concept. But there are other concepts that are not so simple. For example, the concept *man* is not a simple concept. It is not a simple thing to say exactly what a man (meaning *human being*) is.

The ancient Greek philosopher Aristotle once gave a tongue-in-cheek definition of *man*. He said a man was a *featherless biped*. Technically speaking, Aristotle’s definition is correct. Human beings don’t have feathers and they are all bipeds (animals that walk around on two feet). But if you were an intelligent being (say, from another planet) who had never seen a human being before, would this description really tell you enough to

**The two properties of simple apprehension are comprehension and extension.**



## Chapter 2

**Comprehension can be defined as the completely articulated sum of the intelligible aspects or elements (or notes) represented by a concept.**

know what a man is? It certainly counts out birds, since they have feathers. And it counts out horses, because they walk around on four legs instead of two. But even if the term “featherless biped” applied only to human beings, it still wouldn’t tell us what a man is. The expression “featherless biped” doesn’t tell us that he is rational, or that he is the only being that is created in the image of God. It doesn’t tell us many things about human beings that make up their nature or essence.

But there is a way to break down the complex elements of a concept. These elements of complex meaning are made clear by the use of the idea of *comprehension*.

*Comprehension* can be defined as *the completely articulated sum of the intelligible aspects, or elements (or notes) represented by a concept*.

All this means is that when we ask what a man is, we are asking, “What is the comprehension of the concept *man*?”

When we ask the question, “What is *man*?” we can correctly say, as did Aristotle (in a more serious moment), that a man is a *rational animal*. We know (or at least we should know) what the term *rational* means. To be rational is simply to have the ability to distinguish the true from the false.

The term *rational* is a simple concept, which doesn’t mean that it is easy to understand, only that it cannot be broken down into simpler parts. But the term *animal* is not simple, since it can be broken down into simpler parts. So when we try to answer the question, “What is an animal?” we continue to break it down into simpler and simpler concepts until we have included all the simple concepts that make up the concept *animal*.

In fact, we can break down the concept *animal* into the following simple concepts:

- ✓ sentient
- ✓ living
- ✓ material
- ✓ substance

The word *sentient* means it has senses, such as sight, hearing, etc. The word *material* means it has a body, rather than being purely spiritual—like angels. The word ‘substance’ simply means it is something rather than nothing.

\_\_\_\_\_ **Notes.** In logic, each one of these simple concepts we used above to define the complex concept *animal* (sentient, living, etc.) are called *notes* (look back at the definition of *comprehension* we used above.) As you can see, there are four simple concepts into which we have broken the complex concept *animal*. Therefore, the concept *animal* is said to have four notes. In other words, the answer to the question, “What is an animal?” is, “A sentient, living, material substance.”

If, on the other hand, we go back to the term *man*, which we said was a *rational animal*, and ask, “What is a man?” we say, “A *rational*, sentient, living, material substance.” The concept animal, in other words, has four notes:



- ✓ sentient
- ✓ living
- ✓ material
- ✓ substance

The concept *man*, on the other hand, has five notes:

- ✓ *rational*
- ✓ sentient
- ✓ living
- ✓ material
- ✓ substance

\_\_\_\_\_ **The Porphyrian Tree.** When you were very young you may have played a game called, “Animal, vegetable, mineral”. In it, a thing was presented to you and you were to tell whether the thing was an animal, a vegetable or a mineral. The use of the term *comprehension*, in which we state the notes (or *categories*) to which a thing belongs, is a little bit like this childhood game—it is just more complex.

We can put all the notes by which we comprehend an object into a diagram. The diagram you see in *Figure 2-1* is called the *Porphyrian Tree* because it was invented by the 3rd-century logician Porphyry. It gives us a convenient way to break down a complex concept into the simple concepts out of which it is made.

We can apply comprehension to any object. In fact, let’s apply it to the concept *chair*, since that is the concept we used in the last chapter.

Notice that the first category on the Porphyrian Tree is *substance*. If a thing is a thing at all—in other words, if it exists—then it is said to have substance. A unicorn, for example could not be said to have substance because there are no unicorns. They don’t exist. But a chair exists, so it must therefore have substance. But what kind of substance?

Is it material substance or nonmaterial (or spiritual) substance? A chair is, of course, a material substance; in other words, it has *body* (the next level of the Porphyrian Tree). Now we know, then, that a chair is *material substance*. But what kind of material substance? Is it living material substance or nonliving material substance? A chair (let’s say it is a metal chair instead of a wooden one) is a nonliving material substance, since metal cannot be said to be living.

And that is about as much as we can say about it. We can say, then, that the complex concept *chair* consists of the following simple concepts:

- ✓ material
- ✓ substance

In other words, we could go only two steps down on the Porphyrian Tree, and therefore the concept *chair* has only two notes. It is a substance with a body. The answer to the question “What is a chair?” then, is “A nonliving, material substance.” [Notice here that there are three adjectives we use to describe the chair. This would make you think that the concept ‘chair’ has three notes. But the term ‘nonliving’ is there to let you know that it doesn’t go down to the next step on the Porphyrian Tree. The term *nonliving* is sort of like a logical cul-de-sac that doesn’t go anywhere. On the Porphyrian Tree, only one of the two ways at each step leads to the next step down (the ones that go to the left). The other leads nowhere. If we had

**To ask what is the comprehension of a concept, then, is to ask the question, “What is a man (or animal or chair, etc.)?”**



# The Porphyrian Tree

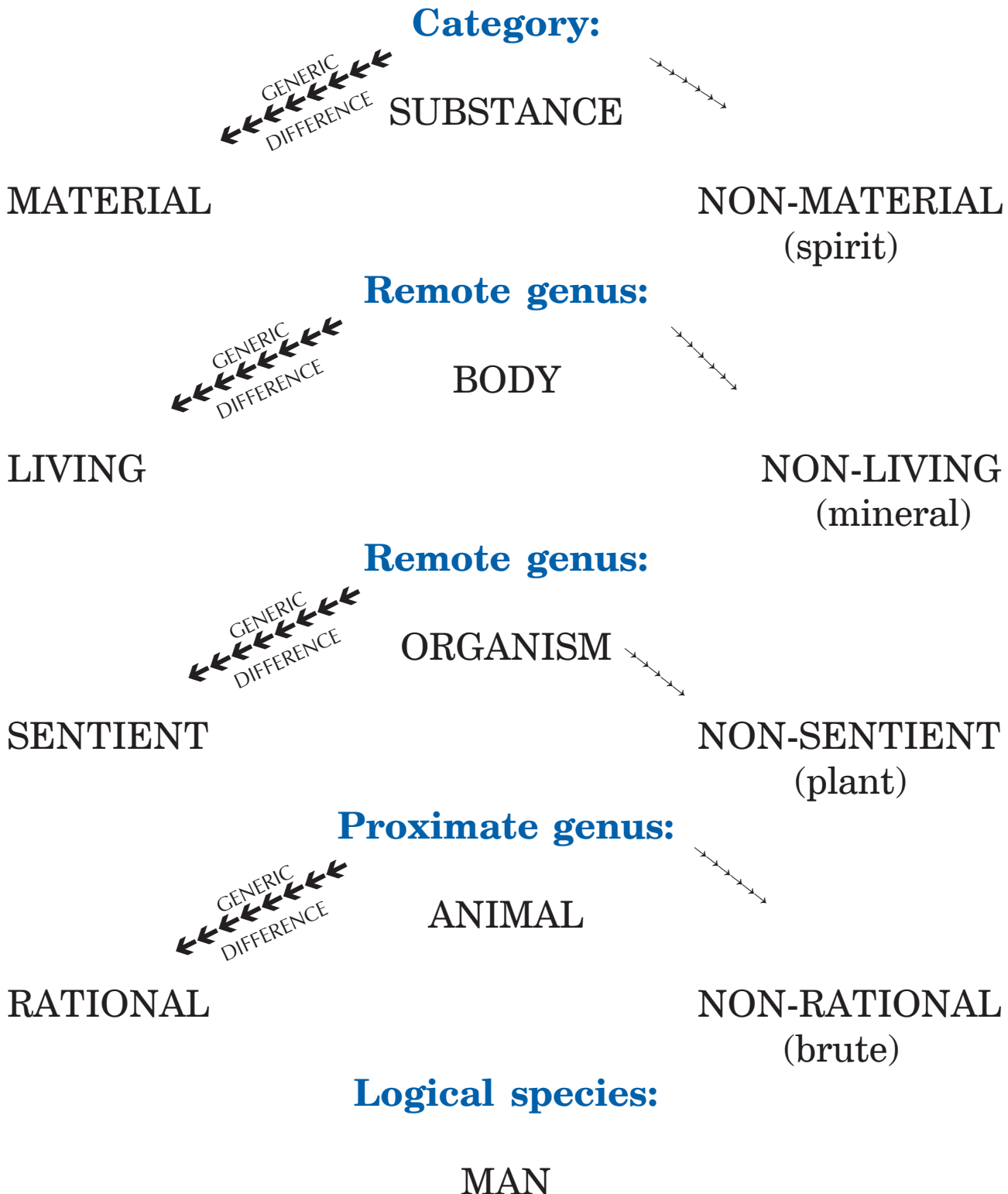


Figure 2-1



determined that the chair was living, rather than nonliving, we could have gone down one more step on the Porphyrian Tree and it would have had three notes. But it is not living, so it has only two.]

To ask what is the comprehension of a concept, then, is to ask the question, “**What is a man (or animal or chair, etc.)?**”

You can see that the concept *animal*, which we defined as a substance that was material, living and sentient, is on the fourth step down on the Tree, indicating it has four notes. The concept *man*, on the other hand, is five steps down, indicating it has five notes.

\_\_\_\_\_ **Extension.** The second of the two properties of simple apprehension we study in this chapter is the property of *extension*.

To ask about the extension of a concept is not to ask, “What is a man (animal, chair, etc.)?” but it is to ask instead, “To what does the concept *man* refer?”

For example, the answer to the question, “What is *man*?” (comprehension) is, “A substance that is material, living, sentient and rational.” But the answer to the question, “What is the extension of *man*?” is, “All the men who have ever lived, who are now living and who will live in the future.”

We can ask the same questions about the concept *animal*. The answer to the question, “What is an animal?” is, “A substance that is material, living and sentient.” And the answer to the question, “What is the extension of *animal*?” is, “All the animals (including men, lions, dogs, fish, insects, etc.) that have ever lived, are now living, and that ever will live.”

Comprehension tells us what the essence of a thing is; extension tells us the things to which that essence applies.

\_\_\_\_\_ **The Relationship between Comprehension and Extension.**

Notice an important thing about the relationship between comprehension and extension; namely, that the greater number of notes a concept has, the less extension it has. The concept *man* has five notes—one more than the concept *animal*. Yet, while the concept *animal* has only four notes, the variety of things to which the concept *animal* applies is much greater.

In other words, while the concept *man* has more notes (five) than the concept *animal* (four), the concept *man* applies to fewer things. While the comprehension of the concept *man* is greater than the concept *animal*, the extension of the concept *animal* is greater than the concept *man*.

The greater the comprehension a concept has, the less extension it has; and the more extension it has, the less comprehension.

\_\_\_\_\_ **Summary.** In this chapter, we have discussed the *properties* of simple apprehension. We said there are two properties of simple apprehension: *comprehension* and *extension*. The comprehension of a simple apprehension is a description of what a concept is. The extension of a concept is a description of the things to which a concept applies. We said, finally, that the greater the comprehension of a concept, the less its extension; and the greater its extension, the less its comprehension.

**To ask what is the extension of a concept is to ask, “To what does the concept *man* refer?”**

**The greater the comprehension a concept has, the less extension it has; and the more extension it has, the less comprehension.**