Prologue

The Nature of Logic

Text from St. Thomas Aquinas

1. There is a twofold operation of the intellect, as Aristotle says in his book On The Soul. One is the understanding of simple objects, that is, the operation by which the intellect apprehends just the essence of a thing alone; the other is the operation of composing and dividing. There is also a third operation, that of reasoning, by which reason proceeds from what is known to the investigation of things that are unknown. The first of these operations is ordered to the second, for there cannot be composition and division unless things have already been apprehended simply. The second, in turn, is ordered to the third, for clearly we must proceed from some known truth to which the intellect assents in order to have certitude about something not yet known.

2. Since logic is called the rational science, it must direct its consideration to the things that belong to the three operations of reason we have mentioned. Accordingly, Aristotle treats those [things] belonging to the first operation of the intellect, i.e., those conceived by simple understanding, in the book Categories; those belonging to the second operation, i.e., affirmative and negative enunciation, in the book On Interpretation; those belonging to the third operation in the book Prior Analytics and the books following it, in which he treats the syllogism absolutely, the different kinds of syllogism, and the species of argumentation by which reason proceeds from one thing to another. And since the three operations of reason are ordered to each other, so are the books: the Categories to On Interpretation and the books following it.

Lesson

Since logic is one of the most difficult disciplines to master, before we plunge into the subject we should take time to look at it in a general way. We should begin by seeing what we will be studying in logic, why we need to study it, and how we will study it.

St. Thomas refers to logic as both the art of reasoning and the rational science. Now every art and every science has a subject what it is about. For example, music makes beautiful sounds, biology looks at living things, and arithmetic studies numbers. Logic is about three things: words, thoughts, and things. Reasoning is a process of organizing our thoughts, but we can do that only by organizing our words. In turn, those words express our thoughts about real things. Perhaps we can best describe the subject of logic by saying that logic is about words insofar as they signify things through our thoughts.

Although logic is a difficult subject to study, it is absolutely fundamental to the life of the mind. One way to see the necessity of logic is to compare the mind to the hand. The hand is a universal tool, which can do just about anything, but few things well. My hand by itself is good for grasping, pushing, touching. In an emergency I could use my hands to fight, to rip things apart, to dig a hole. But it is much more convenient to fight with a gun, cut with a knife, and dig with a shovel. It is better to use my hands to make tools, which help me to do these things well.

The human mind is much like the hand. By itself it does a pretty good job of thinking about practical matters. No one needs to be a logician to know right from wrong, or to learn how to fix a car. When it deals with the highest questions, however – questions about the soul and God – by itself it rarely thinks well. Like the hand, the mind must make tools for itself that help
it to think well about philosophical and theological questions. It makes words that precisely represent its thoughts, it combines those words into statements, and it combines statements into arguments. These are all tools of the mind. The function of logic is to study these actions in order to make the intellectual tools more easily and without the fear of making mistakes. That is why in another place St. Thomas calls logic the tool of the speculative sciences.

Our study of logic will be divided into three parts. First, we will study simple apprehension, that act by which the mind grasps just what something is. Then we will look at composing and dividing, the act by which the mind knows the true and the false. Finally, we will study discursive reasoning, which enables the mind to move from the known to the unknown.

Modern philosophy has brought confusion to logic, but we will leave aside the many different “logics” floating around in the modern world. In this course we will study logic in the traditional way, following the doctrine of Aristotle. He is called the father of logic because in his writings he gives an almost complete overview of the subject. The beginning of each lesson in this course, then, will be a passage from one of the ancient philosophers, usually Aristotle, the middle an explanation of that passage, and the end a set of logical exercises. First, let’s examine Plato’s dialogue *Meno*, one of the earliest considerations of logical themes.

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