THE MATTER AND ORDER OF WISDOM

This paper presupposes an understanding of the Proemium to Wisdom which Aristotle gives in the beginning of first book of *Wisdom* or *First Philosophy*, the first of the fourteen books *After* (meta) *the* (ta) *Books in Natural Philosophy* (phusika)¹and a reading of the fourteen books enough to follow a thinking out of the matter and order of wisdom.

By the *matter* of wisdom is meant all that wisdom is about. This includes not only what it is first and chiefly about, but also what it is about in a second or even third way. It is difficult to know all that wisdom is about and the order in which it is about all these and even the order in which we learn that it is about these. No one can come to know all this at once. But we can come to know this *paulatim*, step by step.

Aristotle teaches us much about the matter and order of wisdom in the fourteen books of *Wisdom* or *First Philosophy*, but he does not make everything explicit. And knowing the matter and order of wisdom also helps us to understand the order of the fourteen books. But even there, we can only see part of what wisdom is about and its order at one time.

The beginning and cornerstone of any consideration of what wisdom is about is the Proemium to Wisdom given by Aristotle in the first part of Book

¹Perhaps the best way to begin to understand the Proemium is to read it carefully with the exposition of Thomas Aquinas. The Proemium occupies the first two chapters of Book One (980a 21-983a 23) and is the text for the first three Lectios of Thomas' Exposition of the first book. Thomas' division of the Proemium is also given in Aristotle's epilogue to the Proemium in which he recalls what he has done in the reverse order he has done it, going back from where he has ended. (He follows this same reverse order in his epilogue to the Proemium in the *Nicomachean Ethics*.) The division into Lectios corresponds more to the parts of the Proemium than the division into chapters. The first two Lectios correspond to the two parts of the first part of the Proemium and the third Lectio to the second part of the Proemium. The second chapter begins in the middle of the first part and includes the second part of the Proemium.

One. There we learn mainly that wisdom is about causes² and most of all about the first causes or cause.³ But we also meet a six part description of the wise man or wisdom⁴ and a four part consideration of the kind of knowledge that is wisdom⁵ and many other things. It is possible to reason from these to the rest of what wisdom is about. We shall presuppose the reader's knowledge of this proemium here and an understanding of it which is best gotten with the help of Thomas Aquinas' exposition. As is his way elsewhere, Aristotle does *not* give a private opinion about wisdom in the proemium, but he clarifies our *common* thoughts about wisdom and the wise man, and thinks out and reasons out from them an understanding of the goal of wisdom and the kind of knowledge it is.

Aristotle and Thomas reason along at least two different lines from the Proemium to what wisdom is about. We could compare the Proemium to a point where many lines meet. That same point is the beginning of many different lines. Likewise, the Proemium to Wisdom is the beginning of many distinct investigations or lines of inquiry into what wisdom is about and the consideration or determination of them.

Following Aristotle and Thomas, we shall reason in the first part of our paper to a determination of the chief matters of wisdom and the order in which they should be considered.

²This is seen especially when Aristotle manifests in three ways that we consider the man of art or science to be wiser than the man of experience because the

former knows why and the latter, only that it is so.

³Aristotle could show that wisdom is about the first cause(s) from what he used to show that wisdom is about causes. But instead he thinks out a six part description of the wise man and wisdom from our common thoughts about them and uses this to show that wisdom is about the first cause(s). The conclusion becomes even more undeniable.

⁴The wise man knows all things in some way; he knows things difficult for man to know; he is more certain or sure than other men; he is more able to teach; he has knowledge most desirable for its own sake; and he orders all others.

⁵Wisdom is looking knowledge, knowledge for the sake of understanding, not for making or doing; wisdom is liberal knowledge, being for its own sake; wisdom is not a human possession, but more divine; and wisdom is the most honorable and best knowledge because the most divine.

In the second part of our paper, we shall reason following Aristotle and Thomas to the secondary matters of wisdom and the order in which they should be considered.

In the third part of our paper, we shall reason to the tertiary matters of wisdom.

In the fourth part of our paper, we shall try to resolve some of the remaining questions about the order of the books of the *Metaphysics*. By *remaining* questions, we mean those whose answers are not immediately clear from the determination of the matter and order of wisdom

PART ONE

We can reason from wisdom being about the first cause or causes (as its goal) to wisdom being about being as being and the one (as its subject), as Aristotle does in the beginning of the fourth book of *Wisdom or First Philosophy*

In the Proemium to Wisdom, Aristotle had pointed out two differences between experience and an art or science. The former is a knowledge of singulars and the latter is a knowledge of the universal (what is common to many and said of many). And by experience we know only that something is so while art or science is perfected in knowing why something is so.

The more things to which extends the cause aimed at in a science or the more things of which it is a cause, the more universal is its subject. An example will illustrate this beginning. If the king of a city or nation is a cause of more than the general of the army, the science about the king will also be about something more universal (said of more) than the science about the general. Thus, the science about the king would talk about the citizen since the king's causality extends to all citizens. But the science about the general would consider the soldier since his causality extends to all the soldiers under his command. Now in our citizen army, every soldier is a citizen. But every citizen is not a soldier. *Citizen* is said of more than *soldier* just as the king of the city or nation is a cause of more than the general of the army.

The reason why ethics considers in general all the goods of man while the art of cooking does not is that ethics aims at the end of the whole of human life while the art of cooking aims at good-tasting food.⁶ The end that ethics aims at is the end of more things than the end aimed at by the art of cooking.

Thus, if wisdom aims at the first cause or causes of all things, its subject must be said of all things. But it is *being* that is said of everything that is. Hence, wisdom must be about being as being.⁷

One could also reason to this from the first attribute in the six part description of the wise man: the wise man know all things insofar as this is possible for man. But it is not possible for man to know all things in particular for there is an infinity of them and reason cannot go through an infinity of things one by one. But reason can know even an infinity of things in general by knowing what is said of them. For example: the mathematician knows that *no odd number is even* and in knowing this he knows in general an infinity of things since both odd number and even number are said of an infinity of things. If the wise man then knows all things so far as is possible for man, he must know them in general by knowing what is said of all things. And this is being.

Since being and one are convertible, Aristotle goes on to show that the subject of wisdom is not only being as being, but also the one and the many. But we will leave to the reader of the fourth book of *Wisdom* or *First Philosophy* the fuller understanding of why the reasoned out knowledge of being as being is also a knowledge of the one and the many.

After he has shown that the subject of wisdom is being and one, Aristotle also shows that wisdom is about the axioms, the statements known through themselves by all, such as that *the whole is greater than its part*.

⁶This is why the division of all human goods into the goods of the soul and the goods of the body and outside or exterior goods belongs to ethics and politics and not to the art of cooking.

⁷We are touching here upon the part of the reasoning that connects the knowledge whose goal is the first cause(s) with the reasoned out knowledge of being as being. Whether there is a reasoned out knowledge of being as being is another question.

It is one thing to know that reason must consider the axioms and not just assume and use them and another to see that this consideration should belong to the wise man.

At first sight, it would seem that reason need only assume and use the axioms since these statements are not in need of proof and are known by all men. However, the words in these statements are equivocal by reason and most men have never distinguished the senses of those words, let alone seen the order among those senses.⁸ There is also an order among the axioms which all men do not see. The axiom about contradiction is the natural beginning of all the axioms. Hence, a consideration of the axioms is necessary to achieve a completely distinct and ordered knowledge of them.

Moreover, from ignorance of the senses of the words in the axioms and from seeming contradictions that reason runs into in many things it thinks about, some have come to doubt, in words at least, some of the axioms and even the one which is the natural beginning of all of them, the axiom about contradiction. And most men are unable to answer these sophistical objections to the axioms.

Thus, for a completely distinct and ordered knowledge of the axioms and to answer the objections against them, it is necessary for reason to consider the axioms as well as use them. But where or to whom does this consideration belong?

After it has been seen that wisdom is about being as being, it can be reasoned that the consideration and defense of the axioms belongs to wisdom. For the words in the axioms pertain to being as being as is seen first in the axiom which is the natural beginning of them, the axiom about contradiction: it is impossible to be and not be in the same way at the same time. Since the axioms are also beginnings common to all reasoned out knowledge, they must pertain to being as being. For this is common to the subjects of all reasoned out knowledge.

⁸In words equivocal by chance, there is no order among the meanings. But in words equivocal by reason there is an order among the meanings. For reason is defined by order as is clear from the first definition of reason. Reason is the ability for large discourse, looking before and after.

One could also reason from the third attribute of the wise man (he is more certain than others) that he considers the axioms, as Thomas does in his exposition or laying out of the sixth book of the *Nicomachean Ethics:*

Because wisdom is most certain and the beginnings of demonstrations are more certain than the conclusions, it is necessary that the wise man not only know those things which are concluded from the beginnings of demonstrations about those things which it considers, but also that it say what is true about the first beginnings themselves. The wise man does not demonstrate them; but it does belong to him to make known the common things, such as whole and part, equal and unequal, and others of this sort, which being known, the beginnings of demonstrations become known. Whence to the wise of this kind, it pertains to dispute against those denying the beginnings, as is clear in the fourth book of the *Metaphysics*.9

This exhausts, perhaps, what wisdom is about insofar as it is a knowledge of *things*. Wisdom is a knowledge of the first causes, a knowledge of being as being and one, and a knowledge of the axioms (which are also about things). And in the rest of Book Four through Book Fourteen, Aristotle hardly does anything else but consider these three.

In the rest of Book Four, he considers the axiom of contradiction which is the natural beginning of all the axioms. Book Five could be considered as both the beginning of the consideration of being as being and the one as one. Since the words being and one and all the other words that pertain to their parts or causes or properties are equivocal by reason and it is therefore necessary to distinguish in order the senses of these words as he does in Book Five to know

⁹In VI Ethicorum, Lectio V, n. 1182: "..quia sapientia est certissima, principia autem demonstrationum sunt certiora conclusionibus, oportet quod sapiens non solum sciat ea quae ex principiiis demonstrationum concluduntur circa ea quae de quibus considerat; sed etiam quod verum dicat circa ipsa principia prima: non quidem quod demonstrat ea: sed inquantum ad sapientes pertinet notificare communia, puta totum et partem, aequale et inaequale, et alia huiusmodi, quibus cognitis principia demonstrationum innotescunt. Unde et ad huiusmodi sapientem pertinet disputare contra negantes principia, ut patet in quarto Metaphysicae."

what we are talking about. But these are also the words used in the axioms so that the distinction in order of the meanings of these words could also be considered as the end of the consideration of the axioms.

The consideration of being as being in Books Six through Nine is about all the senses of being distinguished in Book Five. There is a brief consideration of accidental being and being as true in Book Six where it is also shown that these are not the main concern of the wise man in his study of being. The main consideration of being is made in Books 7-9: Books Seven and Eight are about substance and Book Nine about act and ability or potency. In Book Ten, Aristotle considers the one and the many.

The last four books of the *Metaphysics* are devoted to the discovery of the first cause(s). In Book Eleven and the first part of Book Twelve, Aristotle gathers what is useful from the earlier parts of wisdom and also from the philosophy of nature to investigate and know the first cause(s). He determines the truth about the first cause(s) in the second part of Book Twelve and in Books Thirteen and Fourteen he gives his final refutation of the positions of the Platonists about the first causes and immaterial substances.

Thus, after showing in the Proemium that wisdom is about the first causes, and in the beginning of Book Four that wisdom is about being as being and the one, and immediately after that in Book Four that wisdom is also about the axioms, almost the whole rest of the fourteen books is devoted to the consideration of these three.

When we compare the order in which Aristotle shows that wisdom is about the first causes, about being as being and the one, and about the axioms, and the order in which he considers each of them, they seem contrary. For the first thing he shows that wisdom is about (the first causes) is the last thing he considers and the last thing he shows wisdom is about (the axioms) is the first that he considers. If we can understand these "contrary" orders, we will have understood most of the order of wisdom and of the fourteen books of *Wisdom* as a whole.¹⁰

Both the order in which Aristotle shows that wisdom is about these three and the order in which he takes up those three follow the first beginning about

¹⁰What is not explained by this is, of course, mainly Book One after the Proemium and Books Two and Three.

the order in our knowledge. This beginning is natural or inborn: we should go from what is more known to us to what is less known to us. This is the beginning for understanding most of the order of wisdom as seen in Aristotle's fourteen books of *Wisdom*. This beginning helps us to see as a whole the order of the proemium in the beginning of Book One and Books Four through Fourteen. For almost all of this can be reduced to following that beginning in determining in order three things that wisdom is about and in the order in which those three are considered.

It is perhaps easier to see that Aristotle is following this beginning in considering the axioms before being as being and the one, and these before the first causes. The axioms are the statements known through themselves by all men, such as that the whole is greater that its part and nothing is before itself. Such statements are the statements most known to us. For the statements known through themselves are obviously more known to us than the statements that are known through proof by other statements. And the statements known through themselves by all men are more known to us than those known through themselves by the wise or learned. And since the first cause is the cause of being as being, and effects are more known to us than causes, being as being is also more known to us than the first cause or causes.

But does this first beginning about order in our knowledge also explain the order in which Aristotle shows that wisdom is about these three? It might seem a paradox at first that what is most known to us (the axioms) should be least known to us to belong to wisdom and what is least known to us (the first causes) should be most known to us to belong to wisdom.

However, this is not such a paradox if we consider more carefully what is most known to us about wisdom. No one praises someone as wise for knowing less than others or even just as much as others. We praise someone as wise because they excel others in knowledge and know things difficult to know. Everyone thinks that wisdom names the most excellent knowledge of reason. And if asked whether wisdom comes in the beginning or in the middle or at the end of our knowledge, everyone is apt to answer at the end. Hence, the last thing one would think is that wisdom is about what everyone knows, the axioms. Who would think, at first, that wisdom is about statements that are obvious to everyone?

Likewise, since a knowledge of things in general would seem imperfect in comparison to a knowledge of things in particular, the most excellent knowledge and the greatest perfection of reason would not seem to be a knowledge of the most general.

And Aristotle's proemium is a witness to this. When comparing experience with art or science, he does not show that the man of art or science is wiser than the man of experience because the former knows the universal and the latter only singulars. Indeed, from this difference he reasons that experience is in some way superior to art or science. Since doing is in the singular, the man of experience may succeed where the man of mere universal knowledge fails. For what is done is singular. The doctor does not cure man, but this man. Rather, Aristotle reasons that the man of art or science is wiser than the man of mere experience because the former knows why and the latter only that it is so. And in the second part of the proemium, when Aristotle wants to manifest that wisdom is the most honorable and best knowledge, he does not reason from its being most universal, but from its being most divine, being about the first cause which is God, and this being the kind of knowledge which God would have most of all.

Since then *all* understand by *wisdom* a knowledge that is best and most excellent, it is more known to us that wisdom is about the first cause than about what is most general, let alone about what everyone knows (the axioms). Someone might wonder whether man can know the first cause of all things, but no one would doubt that the man who has got that far is to be called wise.

And since the one who reasons well to know something must reason from what is more known to us to what is less known to us, one can see that Aristotle follows this rule throughout these two orders. He reasons from wisdom being about the first causes to its being about being as being and he reasons from the latter to its being about the axioms. Then he reasons from the axioms and other beginnings to a knowledge of being as being and he reasons from a knowledge of being as being (and especially of the order of act and ability) and other things to a knowledge of the first cause as pure act rather than matter which is in (passive) ability or potency.

Thus when we see that Aristotle follows the order from what is *more* known to us to what is *less* known to us, both in determining what wisdom is

¹¹The two orders here are the order in which he shows that wisdom is about these three and the order in which the truth about these three is determined.

about and in determining the truth about these, we can see the major order of wisdom as a whole and that it cannot be otherwise.

We can also see in these two orders of reasoning how complete is wisdom. As Aristotle teaches us in the beginning of the first book of *Natural Hearing* (the *Physics*), what is more known or knowable by us is less known or knowable by nature or less knowable simply. And what is less knowable by us is more knowable by nature or simply. This is seen both in our knowing things in a confused way before distinctly and in our generally knowing effects before causes. But in going from the axioms to the first cause, the wise man is going from what is most known to us (in statements) to what is most known by nature (the first cause). Thus, the wise man seems to go almost from the beginning to the end of the natural road in our knowledge. The natural road goes from the more known to us to the more known simply. And among statements, the axioms are *most* known to us and therefore come first or at the beginning. And the first cause, especially being pure act, is what is *most* known or most knowable by nature.

And when we add that nothing seems to come between the consideration of the axioms and being as being so that the two studies seem to be in a way continuous and nothing comes between the study of being as being and the knowledge of the first cause so that they also seem to be continuous, the completeness of wisdom seems perfect. We call syllogisms *continuous* when the

¹²The first cause is most known by nature or most knowable simply because it is pure act and something is knowable to the extent it is in act. This is shown in Book Nine of the *Metaphysics*

¹³This is true especially insofar as that road is found in reason.

¹⁴There are other ways in which the wise man goes from what is most known to us to what is most known by nature *in things*. The act which is most known to us is motion, but motion is the act which is least actual, being the act of what is in ability insofar as it is in ability. In going then from motion to the unmoved mover who is pure act, we are going from the act which is most known to us but least knowable by nature to the act which is least known to us but most knowable by nature. This movement of reason is the largest discourse of reason in one sense of *largest*. It goes between the acts which are the furthest apart. Also, in Books 11 & 12, Aristotle combines these because he goes from the first axiom and imperfect being, both accidental being and motion, in Book 11 to material substance in the first part of Book 12 and to immaterial substance and the first cause in the second part of Book 12.

conclusion of one is a premiss in the other; the end of one is a beginning of the other. As we saw before, the fifth of *Wisdom* or *First Philosophy* could be considered as both the end of the consideration of the axioms and the beginning of the consideration of being as being and the one.

Since the words in the axioms are names equivocal by reason, the fifth book of *Wisdom* is useful for understanding the axioms more distinctly since there are distinguished in order the senses of those words. And it is also useful for solving the sophistical objections against them from mixing up the senses of those words. (See *whole* and *part*, for example, and the mistake from mixing up their two senses.¹⁵) But at the same time, the distinction of these words is the beginning of a consideration of being as being and the one. The words in the axioms are also the names of being and one and their parts and causes and properties.

The fifth book of *Wisdom* or *First Philosophy* can thus be considered as the end of the consideration of the axioms and the beginning of the consideration of being as being and the one as one. Hence, the consideration of the axioms by the wise man and his consideration of being as being and the one as one could be said to be *continuous* insofar as the end of one is also the beginning of the other. Thus, nothing could fit, it seems, in-between them.

Likewise, the consideration of being as being and the consideration of the first cause(s) seems in some way to be continuous. For the consideration of being is mainly a consideration of substance and the consideration of substance in books seven and eight is completed in book twelve when not only is recalled

¹⁵The sophist could argue thus: animal is only a part of what man is. Man is not just an animal; he is an animal with reason. But animal includes not only man, but also dog and cat and horse etc. Therefore, what is only a part of man is greater than man or includes more than man. This is an example of the mistake from mixing up the senses of a word. There are two senses of *whole* at least, the composed whole which is put together from its parts but not said of them, and the universal whole which is said of its parts, but not put together from them. The mistake here arises from confusing animal as a composing part of the definition of man which is a composed whole and man as a subject part of the universal whole animal. If one stays with the same sense of whole and part, the whole is always greater than its part. The composed whole always has more than one part and the universal whole is always said of more than one of its parts is said of.

that teaching in the first part of the book, but when the truth about the separated or immaterial substances is considered in the second part of that book. And it was for the sake of these substances that we chiefly went through a study of material substances in Books seven and eight. But these immaterial substances are also the first causes. Thus the end of the consideration of being as being, insofar as it is mainly a consideration of substance, is completed together with the determination of the first causes. Thus although Book Twelve does not immediately follow Books Seven and Eight, it is true that the end of the consideration of substance is also a consideration of the first causes. And in this way there is a continuity.

Aristotle calls substance first being and substance is first compared to accidents and motion and privations. But then, he calls the immaterial substances the first substances. God who is a substance in the broad sense of *ens per se* (although not in the genus of substance) is both the first being and the first cause in the fullest sense since there is no being before God and no cause before God. When we see that the first being and the first cause are the same, we see how close is the consideration of being as being and the consideration of the first cause.

This is seen also very clearly in regard to the other chief division of being which is into act and ability, the subject of Book Nine. After considering ability and act in the first two parts of the book, Aristotle then considers their order which means their before and after. It is there that we learn that act is before ability in definition and knowledge, in perfection and goodness, and, simply speaking, in time. Since *first* is defined by before, understanding this order is the beginning for finding the first being and, therefore, the first cause.

Aristotle could go immediately to a determination of the first cause from the consideration of being as being and the one as one, but in Book Eleven and the first part of Book Twelve, he recalls what is useful for the consideration of the first cause, not only from this reasoned out knowledge, but also from natural philosophy. This reminds one of the Proemium where he could reason from the man who knows the cause as being wiser than the man who only knows that it is so, to the conclusion that the wise man in the full sense must be the man who knows the first cause. But instead he thinks out a six part

¹⁶One could perhaps add that we need to recall things from the third book *About the Soul* before we can understand the operation of the first cause.

description of wisdom or the wise man from common thoughts about them and then reasons to the conclusion that wisdom is about the first cause(s).

Three is often enough or all there is of something. And the three chief matters of wisdom seem to be all there could be. Since it is natural to go in the discourse of reason from what is more known to us to what is more known by nature, the first of these is about what is most known to us (the axioms) and the last about what is most known by nature (the first cause). Hence, we seem in a way to have gone from the beginning to the end of the natural way of knowing. And since the first is continuous in a way with the second and the second, as we have seen, with the third, there does not seem to be anything that could have been left out in-between. Thus these three seem to be a most significant example of three is enough or all. The three things considered by the wise man seem most complete because they go from what is most known to us (in statements) to what is most known by nature (the first cause) without anything being able to come in between except the consideration of being as being. We have a beginning, middle and end. We seem to have another example where three is enough.

Every reasoned out knowledge is about its subject which it seeks to know in the light of the causes of that subject. But wisdom differs from other forms of reasoned out knowledge, not only because it seeks the *first* causes, but also because it is about the axioms. And in the latter way, it seems to be in the genus of understanding as well as in the genus of reasoned out knowledge. Aristotle, in the *Nicomachean Ethics*, speaks of it as both:

It is clear that wisdom is the most certain reasoned out knowledge. It is necessary therefore that the wise man knows not only what is from the beginnings, but that he also speak the truth about the beginnings. Therefore, wisdom will be both understanding (nous)and reasoned out knowledge (episteme), having the head as it were, being the reasoned out knowledge of the most honorable.¹⁷

And Thomas commenting on these words also notes that wisdom is both:

Wisdom, insofar as it says what is true about the beginnings, is understanding (*Intellectus*), but insofar as it knows those things which are concluded from the beginnings, it is reasoned out

¹⁷Nicomachean Ethics, Book VI, 1141a 16-20

knowledge (*scientia*). It is distinguished however from reasoned out knowledge (*scientia*) taken in general on account of the eminence which it has among all the forms of reasoned out knowledge: for it is the virtue of all reasoned out knowledge.¹⁸

Thomas also explains why Aristotle calls wisdom the *head* of all the forms of reasoned out knowledge:

Wisdom is not just any reasoned out knowledge, but a reasoned out knowledge of the most honorable and divine things, so that it has the aspect of a head among all the forms of reasoned out knowledge. For just as the motions and operations of all the other members are directed through the senses which are in the head, so wisdom directs all the other forms of reasoned out knowledge, insofar as all the other take their beginnings from it.¹⁹

Although Aristotle usually speaks of wisdom as a reasoned out knowledge (episteme) or as a knowledge over a road (methodos), the above excellence is reason to distinguish it as a more perfect habit or virtue than reasoned out knowledge. And in the *Summa Theologiae*, Thomas makes this point:

Wisdom is a reasoned out knowledge (*scientia*), insofar as it has that which is common to all reasoned out knowledge which is that it demonstrates conclusions from beginnings. But because it has something of its own above all other forms of reasoned out knowledge, which is that it judges about all, and not only as regards conclusions, but also as regards the first beginnings; therefore it

¹⁸In VI N. Ethicorum , Lectio V, n. 1183: "...sapientia, inquantum dicit verum circa principia est intellectus, inquantum autem scit ea quae ex principiis concluduntur, est scientia. Distinguitur tamen a scientia communiter sumpta propter eminentiam quam habet inter alias scientias: est enim virtus quaedam omnium scientiarum."

¹⁹In VI N. Ethicorum , Lectio VI, n. 1184: "...sapientia non est qualitercumque scientia, sed scientia rerum honorabilissimarum ac divinarum, ac si ipsa habeat rationem capitis inter omnes scientias. Sicut enim per sensus, qui sunt in capite, diiriguntur motus et operationes omnium aliorum membrorum, ita sapientia dirigit omnes alias scientias, dum ab ea omnes aliae sua principia supponunt."

can be considered as a more perfect virtue than reasoned out knowledge.²⁰

But just as there is reason to distinguish wisdom from reasoned out knowledge, there is also reason to separate it from (natural) understanding. The distinction of the three virtues of theoretical or looking reason is not even to be considered the division of a genus into its species:

Whence, if someone considers rightly, these three virtues are not distinguished equally from each other, but in a certain order; just as in potential wholes, of which one part is more perfect than another, as the reasonable soul is more perfect than the sensing soul, and the sensing, than the vegetative. For in this way, reasoned out knowledge (*scientia* or *episteme*) depends upon natural understanding (*intellectus* or *nous*) And both of these depend upon wisdom (*sapientia* or *sophia*) as upon the most chief one which contains under itself both understanding and reasoned out knowledge, as judging the conclusions of reasoned out knowledge and their beginnings.²¹

Once we see that wisdom is in a way both understanding and reasoned out knowledge or that it contains, like a potential whole that is more perfect, both reasoned out knowledge and (natural) understanding, we can understand better how it has three chief matters. For insofar as it is understanding or contains more perfectly natural understanding, its matter is the axioms. But insofar as it

²⁰Summa Theologiae, Prima Secundae, Q. 57, Art. 2, Ad 1: "...sapientia est quaedam scientia, inquantum habet id quod est commune omnibus scientiis, ut scilicet ex principiis conclusiones demonstret. Sed quia habet aliquid proprium super alias scientias, inquantum scilicet de omnibus iudicat; et non solum quantum ad conclusiones, sed etiam quantum ad prima principia: ideo habet rationem perfectioris virtutis quam scientia."

²¹Thomas Aquinas, *Summa Theologiae*, Prima Secundae, Q. 57, Art. 2, Ad 2:

[&]quot;...Unde, si quis recte consideret, istae tres virtutes non ex aequo distinguuntur ab invicem, sed ordine quodam; sicut accidit in totis potentialibus, quarum una pars est perfectior altera, sicut anima rationalis est perfectior quam sensibilis, et sensibilis quam vegetabilis. Hoc enim modo, scientia dependet ab intellectu sicut a principaliori. Et utrumque dependet a sapientia sicut a principalissimo, quae sub se continet et intellectum et scientiam, ut de conclusionibus scientiarum diiudicans, et de principiis earundem."

is reasoned out knowledge or contains reasoned out knowledge in perfection, it has a subject (being as being) whose causes (the first causes) it seeks to know.

PART TWO

If wisdom goes from the statements *most known to us* to the first cause which is *most known by nature or simply* through a consideration of being as being and the one and the many, and the middle is *continuous* with the first and with the last, there does not seem to be room for anything else that wisdom could be about. But if we make another beginning of the proemium and proceed along another road, we will find that wisdom is about something else although in a quite secondary way. For wisdom is first and chiefly about its subject and its end or goal.

In the beginning of the second book of *Wisdom* or *First Philosophy*, the second book *After the Books in Natural Philosophy* Aristotle considers *how man is towards knowing truth*. Thomas gives in his exposition there a reason why this consideration belongs to wisdom:

The consideration of truth is different in first philosophy and in the other particular sciences. For each particular science considers some particular truth about a limited genus of things, as geometry about the magnitudes of things and arithmetic about numbers. But first philosophy considers the universal truth about things. And therefore it belongs to this philosopher to consider how man is towards knowing truth.²²

²²In II Metaphysicorum, Lectio I, n. 273: "Aliter autem se habet consideratio philosophiae primae circa veritatem, et aliarum particularium scientiarum. Nam unaquaeque particularis scientia considerat quamdam particularem veritatem circa determinatum genus entium, ut geometria circa rerum magnitudines, arithmetica circa numeros. Sed philosophia prima considerat universalem veritatem entium. Et ideo ad hunc philosophum pertinet considerare quomodo se habeat homo ad veritatem cognoscendam."

This reason is based on the Proemium because there we learn that wisdom is a looking science whose end is truth rather than a practical science whose end is doing or making. And we also learned that it is about all things²³ and most universal in its consideration.

But after Aristotle has shown how man is towards knowing truth, he also seems to give another reason why the consideration of how man is towards truth should belong to wisdom. But this reason is more from the end or goal of the wise man (to know the first cause) than from the description of the wise man (in which it is stated that the wise man knows all things in some way). He first shows that the consideration of truth belongs more to the looking sciences than to the practical ones because it is the end of the former to know truth while the end of the latter is doing or making and because the former consider eternal truths while the latter more contingent truths. And then Aristotle shows that among the looking sciences, the knowledge of truth most of all belongs to wisdom. For when the same belongs to two things, but to one because of the other, it belongs more to the cause. If hot belongs to the fire and the air around the fire, but to the air around the fire because of the fire, it belongs more to the fire. The fire is hotter than the air. This is very important in every part of philosophy. Hence, if true belongs to the cause and the effect, but to the effect because of the cause, it belongs more to the cause. Therefore, the first cause must be most true.

Thus from the Proemium as another beginning, we can reason to wisdom being about how man is towards knowing truth.

But if it belongs to the wise man to consider how man is towards knowing truth, would it not for the same reasons belong to the wise man to consider the ways of knowing or coming to know truth? Indeed, this is what Aristotle begins to consider in the end of Book Two.

Perhaps, there is art in separating the consideration of how man is towards knowing truth in the beginning of Book Two and the start of the consideration of the ways of knowing or coming to know truth at the end of the

²³This is the first part of the six part description of the wise man or wisdom in the proemium.

book by the reason for these two considerations belonging to wisdom in the middle of the book.²⁴

It is not hard to see that we should know how man is towards knowing truth before we consider the ways of coming to know truth. Unless we know how man is towards knowing truth, we can not discover the ways he must come to know truth. This will become more clear when we consider what comes under these two considerations.

Under how man is towards knowing truth, the philosopher first considers that knowing truth is in one way difficult for man and in another easy. He then shows the three ways in which it is easy. Next, he shows that the cause of the difficulty in knowing can be either in the things we are trying to know or in the weakness of our reason, and that the latter is the chief cause. Finally, he considers the ways in which one man is helped by another in knowing truth. Even in the pursuit of truth, man is a social animal.

Under the ways of knowing or coming to know truth, Aristotle is not as explicit and leaves it to us to see all that the wise man must consider. He goes to some of the more difficult things and the ones which are most necessary for wisdom and leaves it to us to fill out the whole picture with the hints he gives in various places. Fortunately, we have Thomas Aquinas, Boethius, Msgr. Maurice Dionne²⁵ and others to help us follow up these hints.

There are, at least, two distinctions which the wise man should bring out among the ways of knowing or coming to know truth. And he must see the order among those distinguished. The wise man must distinguish between discovery by oneself and learning from another and find their order. And he

²⁴Plato had done something similar in his great introduction to logic (the art of defining and reasoning) in the dialogue called the *Meno*. In the beginning, he introduces us to the art of defining and in the end to the art of reasoning. But he has separated these two by a middle part on what is common to both: coming to know what you do not know through what you do know. Both in defining and in reasoning, we come to know the unknown through what is known already.

²⁵Charles De Koninck thought that Msgr. Dionne was the wisest man of his generation, the greatest philosopher he had met in either Europe or America. Considering the greatness of De Koninck himself, this is no mean testimony to Dionne.

must distinguish and see the order among the roads followed in discovery or learning.

Discovery by oneself, of course, comes before learning from another in that someone must discover something that others do not know before he could teach it to others. But it is also important to see that teaching and learning should imitate the way of discovery. Thus, the way of learning is not substantially different from the way of discovery. And if we see how others discovered in the past, it may help us in the future to discover something else.

Book One of *Wisdom* or *First Philosophy* after the Proemium could be said to be ordered to judging whether Aristotle can learn wisdom from his predecessors. But an examination of their thinking shows that they had not even understood clearly the distinction of the four kinds of cause, let alone arrived at a knowledge of the first cause or causes. Hence, Aristotle must discover the first cause(s) even though this will not be without their help. And in the beginning of Book Three,²⁶ he shows the need to doubt well before we can find the truth about these things. The beginning of Book Three is indeed a most important teaching on how discovery is made, especially in those forms of reasoned out knowledge which are more difficult than mathematics.

The careful reader might wonder why Book Two comes between the discourse of Book One after the Proemium which shows that Aristotle cannot simply learn wisdom from the thinkers before but must discover it himself and Book Three which begins with subtle and profound teaching on how we discover and begins that process. The second surely comes after the first, but why not *immediately* after. This question will be answered in the fourth part of this article.

The wise man should also distinguish the roads and ways of coming to know truth. But Aristotle does not do this explicitly in the third and last part of Book Two. Nevertheless, Aristotle does consider in various places the roads and ways of going forward and touches upon their order, without explicitly making the distinction in one place. To avoid confusion, we should make explicit here the distinction.

²⁶995a 24-995b 3 Thomas expounds this in the first Lectio of his commentary on that book.

Before making explicit the distinction, we should know what is being distinguished. Aristotle speaks sometimes of a road and sometimes of the way of going forward along this road. Thus in the proemium at the beginning of the first book of *Natural Hearing* (The *Physics*), Aristotle speaks thus:

The road from the more known and more certain to us to the more certain and more known by nature is inborn. For the known to us and the known simply are not the same. Whence it is necessary to go forward in this way from the more uncertain by nature, but more certain to us to the more certain and more known by nature.

We do not intend to expound or explain the above words here, but we give them to show the connection of the words *road* and *to go forward in this way.* These two correspond like a distance and the motion over that distance. We learn in the sixth book of *Natural Hearing* (the *Physics*), that the motion over a distance or road is divided as is that distance or road. Likewise, the before and after in the motion along a road follows or corresponds to the before and after in the road over which one moves. In likeness to this, we can speak of a road or order in the things we know or consider as they are in our knowledge and our thinking follows this order. The order in our thinking follows the order in our thoughts.

But Aristotle often does not speak as fully as in this text. He will simply speak of the way (tropos) (way) of reasoned out knowledge (episteme)). Thus, in the second book of *Wisdom*:

Hence, one should be educated how each should be received since it is absurd to seek at the same time reasoned out knowledge and the way of reasoned out knowledge.²⁷

Thomas Aquinas likewise often speaks briefly of the *modus* of a *scientia* or reasoned out knowledge.

But in his commentary on the third part of the second book of *Wisdom*, Thomas distinguishes between the common way of proceeding in reasoned out knowledge and the private way of proceeding in each reasoned out knowledge. Aristotle in the text is speaking of the latter and does not distinguish the two. Thomas reasons that just as a man should learn the private way of each

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²⁷*Metaphysics*, Book Two, 995a 12-14

reasoned out knowledge in its beginning, so he should learn logic before the other forms of reasoned out knowledge since logic considers the common way of proceeding in reasoned out knowledge:

He says first therefore that because diverse [thinkers] sought the truth in diverse ways, it is necessary that a man be instructed in which way what is said in each reasoned out knowledge should be received. And because it is not easy for man to grasp two things at once, but when he pays attention to two, he is not able to grasp either; it is absurd that a man seek at the same time reasoned out knowledge and the way of reasoned out knowledge.

And because of this one ought first to learn logic before the rest of reasoned out knowledge because logic treats of the common way of going forward in all the other forms of reasoned out knowledge. The private way of each reasoned out knowledge should be considered in each reasoned out knowledge around its beginning.²⁸

Thomas' distinction here between the common way of going forward in reasoned out knowledge and the private way of going forward in each reasoned out knowledge does not include every way of going forward in our knowledge. It was Msgr. Dionne who first made explicit to my knowledge the universal distinction of the ways of proceeding.²⁹ Dionne was thinking in addition of the natural way of proceeding which Aristotle touches upon in the text we have seen from the Proemium to the eight books of *Natural Hearing*. Since as we have seen in that text that one is said to proceed or go forward along a road, we could also speak of three roads in our knowledge.³⁰ We can now make more

²⁸In II Metaphysicorum, Lectio V, n. 335

²⁹Some of us who studied under Msgr. Dionne can still remember the semester when his class followed a logic class at Laval University. The logic professor had begun with this text from the commentary on the *Metaphysics* saying there are *two* ways of proceeding. Msgr. Dionne, in the class following, began with the words that there are *three* ways of proceeding. I remember turning to another student who had the same reaction: did we hear correctly?

³⁰In a conversation of the author with Msgr. Dionne on the Proemium to the *Physics*, Msgr. made the point, looking at the text of Moerbeke, that *via* was more concrete than *modus procedendi*. Likewise, I think it best to distinguish

explicit this distinction into three roads to which correspond three ways of proceeding or going forward. We can gather from the texts of Aristotle where he touches upon these roads that he had distinguished them and seen their order. But we do not have in the fourteen books of *Wisdom* or elsewhere, to my knowledge, an explicit distinction of them and an elucidation of their order. But such a distinction and ordering could belong only to the wise man because of his priority in the consideration of truth. We cannot here enter into a full consideration of the distinction and order of the roads and ways of going forward in our knowledge, but some understanding of them is necessary to see fully the matter and order of wisdom.

Since a road in our knowledge is an order or a before and after in our knowledge; and nature and reason make order; the roads in our knowledge are either made by nature or by reason.

The first road in our knowledge is the one made by nature and is the road from the senses into reason. Since man is by nature an animal with reason, the road from the senses into reason is natural for man. Animal is defined by sense and what is generic is before in time and generation what is specific. And genus is taken from matter and difference from form, and matter is not only before form in generation, but also matter is for the sake of form, as Aristotle shows in the second book of *Natural Hearing* (the *Physics*) Since nature is first in a thing, the natural road in our knowledge must be the first road therein.

There are also roads in our knowledge made by reason. These presuppose the natural road and are acquired with the help of it.

First there is the road from reasonable guesses to reasoned out knowledge. This road is studied in logic. Aristotle showed us how to reason from probable opinions which are reasonable guesses in the *About Places* (the *Topics*) and the *common* road of reasoned out knowledge in the *Prior and Posterior Analytics*.

Although reason is common to all forms of reasoned out knowledge since they are acquired by the use of reason, the subject of each reasoned out knowledge is private to it. Hence, in addition to the common road of reasoned out knowledge, there are private roads of reasoned out knowledge

first the roads in our knowledge and then speak of the ways of going forward along these roads.

corresponding to the different subjects. (When we say *private*, we mean private to that reasoned out knowledge although it is common to everyone who knows how to acquire that knowledge.) The private road of each reasoned out knowledge should be considered in the beginning of that knowledge since it must fit the matter considered therein.

The distinction and order of these roads belongs to the wise man since the consideration of truth belongs most of all to him. But he also considers some of these roads more than others.

The consideration of the natural road belongs to the wise man most of all for three reasons. From the sixth attribute of the wise man, that he orders all others, we can see one reason for the consideration of this road belonging to him. Since logic is about the common road of reasoned out knowledge, the logician would seem to be like the wise man. For through his knowledge of the common road of reasoned out knowledge (defining, dividing and demonstrating), the logician is able to direct in general all pursuit of reasoned out knowledge. Hence, it would seem that the logician more directs the wise man (since wisdom is one form of reasoned out knowledge) than the wise man, the logician. Hence, the sixth attribute of the wise man (he directs others, but is not directed by them) would belong more to the logician than to the wise man.

But we are directed by the natural road in acquiring the common road of reasoned out knowledge and in seeing the reasons for what is studied there.

We acquire what is not natural through what is natural, as artificial tools by our hands and language through our natural tendency to imitate. Hence, too, we acquire the roads made by reason through the natural road. Even the use of the word *road* to name the before and after in our knowledge is a result of naming following the road from the senses into reason. For we name things as we know them.

And a knowledge of the natural road also gives us reasons for the common road. Some examples must suffice here. On the natural road, we sense before we understand. But as Boethius said, a thing is singular when sensed and universal when understood. This is why we give examples of a thing before we define it (as Plato represents so often in the *Dialogues*) and why the way of defining most proportioned to us is that of comparing examples of what is to be defined and separating out what they have in common while leaving aside their

differences. This is also why induction (the argument from many singulars to the universal) comes before syllogism and example (the argument from one singular to another of the same kind) comes before enthymeme. A very important before and after on the natural road is that we know things in a confused way before distinctly, as Aristotle shows in the beginning of the first book of *Natural Hearing* (the *Physics*). But this is the reason why we must define and divide and why we name things before we define them and why the first part of a definition is the genus.

A second reason why the wise man especially considers the natural road is that it is the road to wisdom (as distinguished from the road within wisdom, the private road of wisdom). The natural road tends toward wisdom. This can be seen from the way one kind of knowledge is before another along this road. The animal that senses seems wise compared to the plant that does not sense or know what is around it. But the animal with memory of what has been sensed seems wiser than those animals with only sensation. My mother would tell the salesman, "I wasn't born yesterday." But we would be no wiser than the infant born today if we had no memory. But the man of one memory seems less wise than the man of experience. (Experience is the result of bringing together many memories of the same.) Art or science arises from experience, but the man of art or science appears wiser than the man of mere experience because he knows why. And likewise the chief artist than the subordinate artist and looking knowledge more than practical knowledge. The most universal knowledge of wisdom presupposes an experience of the particular forms of reasoned out knowledge which come before wisdom along the natural road.

And in general, as we go from experience to art or science, we are moving in the direction of the universal and from the effect to the cause and therefore in the direction of wisdom which is the most universal knowledge and also a knowledge of the first cause.

The third reason why the consideration of the first and natural road in our knowledge belongs most of all to the wise man is that the reasons for this road belong to wisdom. First of all the reason why the proper object of our reason is the what it is of a sensible thing and must be considered in an image is given by the wise man since the consideration of understandings as such belong to him (for the understanding as such does not depend upon matter).³¹ Further, since

³¹Thomas Aquinas, *In Librum De Memoria et Reminiscentia Commentarium* , Lectio II, nn. 316-317: "Non ergo propter hoc solum indiget intellectus possibilis

all knowledge along the road is ordered to wisdom as a last end and the order of things among themselves is on account of their order to the end, the wise man should explain the order of different forms of knowledge along this road. Further, the reason why in going from the effect towards the cause and from the confused toward the distinct along this road, one is going from what is more known to us towards what is more known or knowable by nature, is given by the wise man who most of all knows that something is knowable to the extent it is in act as Aristotle shows in the ninth book which is on act and ability or potency.

The wise man also takes an interest in the natural road insofar as it is followed in the private road of wisdom itself.³² For the wise man follows this road when he orders the senses of many of the words used in the axioms and to name the subject of wisdom and its parts, causes and properties. And when he considers sensible and material substances before immaterial substances, and act and ability as they are found in motion before act and ability as they can be found even in immaterial things, and goes from the one which is the measure of number to the one which is convertible with being, and reasons from motion to the unmoved mover, he also follows the natural road.

But Aristotle does not have a full consideration of the natural road in the fourteen books of *Wisdom* or *First Philosophy* or even a consideration that is devoted to the road as such. He considers it partially and so far as necessary to

humanus phantasmate ut acquirat intelligibiles species, sed etiam ut eas quodam modo in phantasmatibus inspiciat. Et hoc est quod dicitur in tertio *de Anima*. Species igitur in phantasmatibus intellectivum intelligit. Huius autem ratio est, quia operatio proportionatur virtuti et essentiae: intellectivum autem hominis est in sensitivo, sicut dicitur in tertio *de Anima*. Et ideo propria operatio eius est intelligere intelligibilia in phantasmatibus, sicut intellectus substantiae separatae operatio est intelligere res secundum se intellectas; et ideo huius est causa reddenda a metaphysico, ad quem pertinet considerare diversos gradus intellectuum."

³²Wisdom and natural philosophy follow the natural road much more than mathematics while the latter follows the common road of reasoned out knowledge with more clarity and rigor than the former do. But natural philosophy seems to follow the natural road most of all. Hence, Boethius says in the *De Trinitate* that it proceeds *rationabiliter*. See Thomas' *Exposition* of this there.

manifest something else. Thus, in the Proemium to wisdom in Book One, he shows much of the order of different kinds of knowledge along the natural road. We learn that sensing comes first and is followed by memory of what has been sensed. And then from many memories of the same, we can gather an experience. And by separating out what is common to the many things experienced, we begin to have art or science which is a knowledge of the universal and seeks to know why. We can see a thing is singular when first known and later it is universal, as Boethius said. We can see that sensible things are more known to us than things that cannot be sensed and that effects are usually known before causes. But this consideration of the natural road is for the sake of seeing that wisdom is about causes. But Aristotle could be said to be killing two birds with one stone. He is teaching us much about the natural and first road in our knowledge which is useful to know apart from the reason why it is considered there which is to see that wisdom is about causes.

Another place where Aristotle teaches us about the natural road is in the seventh book of *Wisdom*, the seventh book *After the in Natural Philosophy*. But again he is not attempting a full consideration of the natural road by itself. Rather he touches upon it insofar as it enters into the private road of wisdom. Wisdom is chiefly about substance and Aristotle is explaining why the wise man should consider material and sensible substances before immaterial or separated substances:

It is agreed that sensible substances exist, so one ought to seek first in these. This is presupposed to going over to the more known. For learning thus comes to be in all through the less known by nature to the more known. And this is necessary, just as in actions to make the whole good, good for each from what is good to each, so too to make from what is more known to each what is more known by nature known to each. For what is first known to each are many times little known and have little or nothing of being. But nevertheless from things known slightly but known to oneself, one ought to try to make known the wholly known, going over, as has been said, through these same.³³

This road is followed again and again in the fourteen books of *Wisdom* or *First Philosophy*. Aristotle begins in Books Eleven and Twelve his investigation of the

³³¹⁰²⁹a 33-1029b 12

first substances which are most known by nature, starting from accidental being and motion which have little being. And in his study of act, he goes from motion, the least actual of acts although most known to us, to the first cause which is pure act and thus most knowable by nature.

The wise man is, of course, specially interested in the private road of wisdom for in every reasoned out knowledge one must consider the road and way of going forward which fits the matter or subject of that reasoned out knowledge. Hence, Aristotle determines in book Six the way of considering the subject of wisdom after he has determined that subject in Book Four. This however is not what characterizes wisdom in distinction from other forms of reasoned out knowledge. For even the particular forms of reasoned out knowledge contain a consideration of their own road.

But the wise man, in the universality of his knowledge and concern for truth, must consider in general how the road to follow in any reasoned out knowledge should or should not be determined, as Aristotle does in the last chapter and *Lectio* of Book Two. There he shows the influence of custom upon how we proceed and expect others to proceed which is how we should *not* determine the road and way of going forward in any reasoned out knowledge. Rather, we must determine the matter or subject of that reasoned out knowledge before we can determine the road and way that fits its matter or subject. We can also see how, in this general consideration, the wise man is to some extent directing every other form of reasoned out knowledge. For we are directed in any reasoned out knowledge by a knowledge of its road and way of proceeding. And the wise man directs us in general as to how these private roads should and should not be determined.

And further since the wise man also has experience of the particular forms of reasoned out knowledge, it also belongs to him to distinguish among the private roads of reasoned out knowledge. And this is what Aristotle does especially among the looking forms in Book Six when he distinguishes the ways of defining in natural philosophy, mathematics and wisdom. Boethius continues to do this in the *De Trinitate* and adds further distinctions as between natural philosophy proceeding *rationabiliter* and mathematics, *disciplinabiliter*, and wisdom, *intellectualiter*.

Does the wise man consider the common road of reasoned out knowledge and the way of going forward therein? This is the concern of the logician. Yet there is considerable likeness between the logician and the wise man. Like the logician, the wise man sometimes proceeds *per viam praedicationis*. One of the two chief divisions or distinctions of being is according to the figures of predication. And in beginning the consideration of material substance in Book Seven, Aristotle begins from the way a definition and its parts are said of their subject. Likewise, in that book, we see that there are different kinds of definition for substance and accident and why the definition is one and of one thing even though it has parts. In Book Two we see how definitions are limited in an upward direction. Not every genus is a species, nor is every part of every definition known by definition. And the wise man distinguishes the per se from the per accidens in wisdom and gives reasons why no reasoned out knowledge is about the accidental.

Among these secondary matters of wisdom, there is perhaps a third one after the consideration of how man is towards knowing truth and the consideration of the ways of knowing or coming to know truth. Wisdom is also about the distinction of itself from other kinds of knowledge and the distinction of them and the order of learning them.

It is clear in the fourteen books of *Wisdom* that Aristotle is much concerned with distinguishing wisdom from every other kind of knowledge. To some extent, he does this first in the Proemium itself. This is chiefly by the aim or goal of wisdom which is to know the first cause, but also by the kind of knowledge it is. But in the beginning of the fourth book, when he determines the subject of wisdom (being as being and the one), he again distinguishes wisdom from every particular form of reasoned out knowledge. There are two differences seen there. Every other form of reasoned out knowledge has a subject more particular than being. And it does not consider its particular subject as being. Finally, in the beginning of Book Six, he distinguishes wisdom once more from every other reasoned out knowledge. And especially he distinguishes it from the other forms of reasoned out knowledge whose end is to know or understand (not to do or make) by the way they define.

We should try to understand that this distinction is a matter for wisdom. And perhaps it is best to begin with an induction to show that such a distinction belongs to wisdom. It can be seen by induction that the distinction between a higher knowledge and a lower (and their order) always belongs to the higher knowledge or the knowledge which has more the character of wisdom.

Reason is higher than the senses and the imagination and it belongs to reason to distinguish between the knowledge of reason and the knowledge of

the senses and between thinking and imagining and between thought and image. Likewise, it belongs to reason to consider the order of sense and imagination to reason. The distinction between knowledge of the singular and knowledge of the universal belongs to knowledge of the universal. For although the singular is not universal, what it is to be a singular is universal.

It belongs to the political philosopher to distinguish between political philosophy and political rhetoric and to consider in what way rhetoric is a tool of the statesman. Likewise, it belongs to the political philosopher to distinguish between political foresight or the political art and the military art and to consider the subordination of the military to the political.

Natural philosophy would be wisdom if there were no immaterial substances.³⁴ As it is, it is second philosophy in the order of dignity. ³⁵ But in natural philosophy, we distinguish between the natural and the artificial and between the natural and the mathematical, as can be seen in the second book of *Natural Hearing* (the *Physics*). Likewise, it belongs to the natural philosopher to determine the usefulness of mathematics in the study of natural things and to what extent art imitates and is like nature.

Logic, in the strict sense, is ordered to a knowledge which is expressed in words used properly and not figuratively and in statements composed of such words. The distinction between words used properly and words used figuratively is expressed in words used properly. When Aristotle defines metaphor in the book *About the Poetic Art*, his definition is composed of words used properly and not figuratively. One cannot define what a metaphor is, using metaphors. One can only exemplify what a metaphor is by metaphors. Likewise, it is in knowledge expressed in words used properly and statements composed of them that we can distinguish between such knowledge and that expressed in mathematical symbols and equations. One cannot define or say what a mathematical symbol is, using mathematical symbols. Although one can say in

³⁴*Metaphysics*, Book Six, 1026a 27-31

³⁵Thomas Aquinas, *In VII Metaphysicorum*, Lectio XI, n. 1526: "In hac enim scientia tentamus determinare de substantiis sensibilibus "huius gratia", idest propter substantias immateriales, quia speculatio circa substantias sensibiles et materiales quodammodo pertinet ad physicam, quae non est prima philosophia, sed secunda, sicut in quarto habitum est."

words what a word is and in a statement what a statement is, one cannot write a mathematical equation saying what a mathematical equation is.

The reason why it belongs to the higher knowledge, or the knowledge which has more the character of wisdom, to distinguish between itself and the lower is that the higher knowledge is the end of the lower and the end is the cause of the order of things among themselves and therefore also of their distinction. Moreover, the higher knowledge is more able to know itself than the lower, if the lower is able to know itself at all. Reason can know itself as well as the senses, but the senses cannot even know themselves. Knowledge of the singular cannot know what the singular is, let alone the difference between it and the universal. And the higher knowledge is more able to know the lower than the lower, the higher. In the description of the wise man or wisdom we see that wisdom is the most universal knowledge whence it is more able to know itself and others. And the sixth attribute of the wise man is that he orders others and one cannot order without distinguishing.

There is a connection between wisdom distinguishing itself from every other knowledge and wisdom ordering the others. As Anaxagoras reasoned that the greater mind must be separated from other things if it is to rule over them, so wisdom must be distinct from all the rest of our knowledge if it is going to rule over it. Heraclitus had seen already that if wisdom was just a heap of knowledge there would be bad art; that is, a lack of order. He saw that wisdom must be apart from all the rest.

Learning of many things does not teach one to have understanding; else it would have taught Hesiod and Pythagoras, and also Xenophanes and Heccataeus.³⁶

Pythagoras, the son of Mnesarchus, practiced enquiry beyond all men; and selecting these writings he called them his own wisdom; which was only a knowledge of many things, and bad art. ³⁷

The wise is one thing. It is to understand the mind [thought] by which all things are steered through all things.³⁸

³⁶Heraclitus, DK 40

³⁷Heraclitus, DK 129

³⁸Heraclitus, DK 41

Moreover, since wisdom is last in the order of learning, the wise man must have an experience of the particular forms of reasoned out knowledge before he acquires wisdom. But one who is expert in some particular form of reasoned out knowledge need not have any understanding of what wisdom is. Hence, the wise man can distinguish and see the order of the forms of reasoned out knowledge. Hence, it is appropriate that Thomas Aquinas give this order in his exposition of the *Liber de Causis*:

The aim of philosophers was chiefly towards this that, through all they considered in things, they would arrive at a knowledge of the first causes. Whence they ordered in last place a knowledge of the first causes, to whose consideration they reserved the last time of their life.

First, beginning from logic which considers the way of reasoned out knowledge.

Second, proceeding to mathematics of which even boys can be capable.

Third, to natural philosophy which requires time on account of experience.

Fourth, to moral philosophy of which a young person is not a suitable hearer.

And last, they pursued the divine science which considers the first causes of beings.³⁹

³⁹Thomas Aquinas, In Librum de Causis Expositio , Proemium, nn. 7-8;

[&]quot;Philosophorum intentio ad hoc principaliter erat ut per omnia quae in rebus considerabant, ad cognitionem primarum causarum pervenirerent. Unde scientiam de primis causis ultimo ordinabant, cuius considerationi ultimum tempus suae vitae deputarent. Primo quidem incipientes a Logica quae modum scientiarum tradit. Secundo, procedentes ad Mathematicam cuius etiam pueri possunt esse capaces. Tertio ad Naturalem Philosophiam quae propter experientiam tempore indiget. Quarto, ad Moralem Philosophiam cuius iuvenis esse conveniens auditor non potest. Ultimo Scientiae Divinae insistebant quae considerat primas entium Causas."

It should be noted in this reading that Thomas begins with wisdom as the end of the whole study of the philosopher. If the rest are ordered to wisdom as an end, then it is reasonable that the order among them be determined by wisdom. But the order among them is also determined by the natural road which is, as we have seen above, chiefly considered by the wise man. Thomas touches upon this more in giving the same order of learning in his laying out of the *Nicomachean Ethics* when explaining some words of Aristotle:

He raises a question about this, to wit, why a boy can become a mathematician, but he cannot become wise, that is, a metaphysician or a natural philosopher.

The Philosopher answers to this that mathematical things are known by abstraction from sensible things of which there is experience; and therefore much time is not required for knowing such. But natural beginnings, which are not separated from sensible things, are considered through experience for which is required much time.

As regards wisdom, he adds that the young do not believe sapiential or metaphysical things; that is, they do not attain them with their mind, although they say them with their mouth. But the what it is of mathematical things is not unclear to them because the definitions of mathematical things are of things that can be imagined, but sapiential things are purely understandable. But they do not reach by their mind to those things which exceed sense and imagination because they do not yet have an understanding exercised in such considerations, both on account of the shortness of time as well as on account of the many changes of nature.

Therefore, it will be a suitable order of learning that first boys be instructed in logical matters because logic teaches the way of the whole of philosophy.

Second, they should be instructed in mathematical things which neither need experience, nor go beyond imagination.

Third, in natural things which, although they do not go beyond sense and imagination, require experience.

Fourth, in moral matters which require experience and a soul free from passions, as has been said in the first book.

Fifth, in sapiential and divine things which go beyond the imagination and require a strong understanding.⁴⁰

In these words, Thomas gives additional reasons why these five forms of reasoned out knowledge should be learned in the given order. One should consider that experience which comes before reasoned out knowledge along the natural road explains much of the above order. Since mathematics does not depend upon any experience in its development, it can be learned earlier than natural philosophy and moral philosophy which require experience in their development. And moral philosophy requires a more extensive experience than natural philosophy. One could even say that wisdom or metaphysics comes last because it depend upon an experience in another sense. As Msgr. Dionne once

⁴⁰In Decem Libros Ethicorum Aristotelis Ad Nicomachum Expositio, Liber VI. Lectio VII, nn. 1209-1211, Marietti ed.: "Movet circa hoc quaestionem, scilicet quare puer potest fieri mathematicius non autem potest fieri sapiens, idest metaphysicus vel physicus, idest naturalis. Ad hoc respondet Philosophus, quia haec quidem, scilicet mathematicalia, cognoscuntur per abstractionem a sensibilibus quorum est experientia; et ideo ad cognoscendum talia non requiritur temporis multitudo. Sed principia naturalia quae non sunt abstracta a sensibilibus, per experientiam considerantur, ad quam requitur temporis multitudo. Quantum autem ad sapientiam, subiungit quod iuvenes sapientialia quidem metaphysicalia non credunt, idest non attingunt mente, licet dicant ore; sed circa mathematica non est immanifestum eis quod quid est, quia rationes mathematicorum sunt rerum imaginabilium, sapientialia autem sunt pure intelligibilia. Iuvenes autem de facili capere possunt ea quae sub imaginatione cadunt. Sed ad illa quae excedunt sensum et imaginationem non attingunt mente, quia nondum habent intellectum exercitatum ad tales considerationes, tum propter parvitatem temporis, tum propter plurimas mutationes naturae. Erit igitur congruus ordo addiscendi ut primo quidem pueri logicalibus instruantur, quia logica docet modum totius philosophiae. Secundo autem instruendi sunt in mathematicis quae nec experientia indigent, nec imaginationem transcendunt. Tertio autem in naturalibus; quae etsi non excedunt sensum et imaginationem, requirunt tamen experientiam. Quarto in moralibus quae requirunt experientiam et animum a passionibus liberum, ut in primo habitum est. Quinto autem in sapientialibus et divinis quae transcendunt imaginationem et requirunt validum intellectum."

explained, wisdom requires an experience of the particular forms of reasoned out knowledge. This is, of course, using the word *experience* in an extended sense. Experience is from many particulars, but the *particulars* experienced before natural philosophy or moral philosophy are singulars. But the particulars in the experience required for wisdom are forms of reasoned out knowledge less universal than wisdom, but yet universal knowledge. The order of these four can also be understood by going from the easier to the difficult. The cause of difficulty in knowing is either in things or in us and the latter is the greater cause of difficulty. Natural philosophy and moral philosophy are more difficult than mathematics for the first reason and wisdom than all for the second reason. But the reason for logic coming first is not that it is easier, but because it teaches the way of reasoned out knowledge; and we must know the way of reasoned out knowledge before we can acquire it well.

The wise man's consideration of the order of learning could also be considered as a continuation of his study of the natural road, even though reasoned out knowledge would seem to be more a work of reason than of nature. We are following the natural inclination of this road in this proposed order of learning. This is like the moral virtues which we do not have in their perfection by nature, but they are in accord with the natural inclination of our common human nature.

We have thus reasoned along another line from the Proemium to Wisdom to three secondary matters of wisdom. These three are: (1) how man is towards knowing truth; (2) the ways of knowing or coming to know truth (in general and somewhat in particular) in our reasoned out knowledge; and (3) the distinction of wisdom from other kinds of knowledge, especially from other forms of reasoned out knowledge, and the distinction of the latter and the order of learning them and wisdom. Aristotle treats of the first in the beginning of the second book of *Wisdom* and some of the second in the end of the second book and the beginning of the third. He completes the distinction of wisdom from other forms of knowledge in the beginning of the fourth book and the beginning of sixth book.

The order of these three could not be otherwise. In addition to the reasons touched upon above for this order, we could also point out that the consideration of how man is towards knowing truth is more universal than the ways of knowing truth in reasoned out knowledge. Man knows some truth without having to reason it out. And an understanding of the diverse reasons why it is difficult to know truth is presupposed to understanding why there are

diverse forms of reasoned out knowledge with diverse ways of knowing. For reasoned out knowledge is a habit and different habits are necessary to overcome diverse difficulties. And the distinction of roads is necessary to distinguish diverse forms of reasoned out knowledge. Hence, Aristotle distinguishes the three forms of reasoned out knowledge that are not practical by diverse ways of defining. Aristotle often calls reasoned out knowledge a *methodos* which means *over a road*. And sometimes he calls reasoned out knowledge (episteme) a way of having a methodos.⁴¹ Hence, a knowledge of roads is presupposed to seeing fully a distinction of forms of knowledge that are over a road or that follow a road.

Aristotle does not consider all these matters explicitly in the fourteen books of *Wisdom*. He considers fully how man is towards knowing truth, but his consideration as such of the ways of knowing or coming to know truth is limited to what is most necessary to know the road to follow in wisdom. He carefully and fully distinguishes wisdom from every other kind of knowledge, but he is not as explicit in explaining the order of learning the forms of reasoned out knowledge as Thomas is in the texts we saw above.

There seems then to be three second matters of wisdom,⁴² just as there were three first matters of wisdom.⁴³

PART THRFF

We have seen in the first part that wisdom is chiefly about things, about substance and being in general as a subject, and about the first cause as a goal. And in the second part, we have seen the *secondary* matters of wisdom which are (1) how man is towards knowing truth, (2) the way of knowing or coming to

⁴¹See the beginning of the *Parts of Animals*.

⁴²These are (1) how man is towards knowing truth, (2) the ways of knowing or coming to know truth and (3) the distinction of wisdom and the other forms of reasoned out knowledge of truth and the order of learning them. The last includes also a distinction of their private roads, especially those of the parts of looking philosophy, as we find, for example, in Boethius' *De Trinitate*.

⁴³These were (1) the first causes, (2) being and one, and (3) the axioms.

know truth, and (3) the distinction of wisdom and the other forms of reasoned out knowledge and the order of learning them. But are there any other matters for the wise man to consider?

Perhaps we can get a clue to this from the fact that Msgr. Dionne, after considering some of these secondary matters of wisdom, went on to consider the dispositions of will and emotion which are necessary in the life of the philosopher.

We need to consider here two things. Are there dispositions of will and emotion which are necessary for the philosopher? And if so, does it belong to the wise man most of all to consider these dispositions?

Both Plato in the *Theaetetus* and Aristotle in the *Proemium to Wisdom* state that wonder is the beginning of philosophy, that men both in the beginning and now start to philosophize out of wonder. And this wonder is a disposition of will or emotion. And the philosopher is named from the love of wisdom which is a disposition of will. And if a philosopher must learn from others who are wiser than himself in some matter, he also needs that docility which is in the will by which he is disposed to hear or read carefully, frequently and with reverence the words of those wiser than himself. One cannot even begin to philosophize without wonder and how could someone be a philosopher or lover of wisdom without the love of wisdom. And since one man is not sufficient to acquire any reasoned out knowledge, but every reasoned out knowledge is developed through the contribution of many thinkers, is not docility necessary if the philosopher is going to get very far?

But to whom does it belong to consider wonder and the love of wisdom and docility (and perhaps other dispositions of will or emotion closely connected with them)?

Of these three, it is most obvious from the words themselves that the love of wisdom should be considered by the wise man. Since acts and habits are known by their objects, clearly the man who knows best what wisdom is can consider most fully the love of wisdom. But we have seen that among the secondary matters of wisdom is a consideration of the distinction of wisdom from every other knowledge. Therefore, the consideration of the love of wisdom belongs most of all to the wise man.

Next it is not hard to see that the consideration of wonder also belongs to the wise man. For wonder is a beginning of all philosophy and therefore would belong to the consideration of the most universal philosophy. But wisdom is the most universal philosophy. Therefore, the consideration of wonder also belongs to the wise man.

But a stronger reason is that the wonder of the philosopher is a desire to know why, to know the cause. And if the cause has a cause to know that, and so on till the first cause is known. The desire which is wonder is not fully or finally satisfied before one know the first cause. Hence, just as one reason why the natural road is considered by the wise man is that it is the road to wisdom, so too a very good reason why the wise man should consider wonder is that that desire leads him eventually to the first cause (the knowledge of which is the goal of wisdom). And this is what Plato would seem to have in mind in his obscure sentence when teaching us that wonder is the beginning of philosophy. In the dialogue called the *Theaetetus*, Theodorus, the teacher of Theaetetus, has told Socrates that his pupil is something of a philosopher. Later in the dialogue, when Theaetetus undergoes much wonder, Socrates remarks that Theodorus has guessed well in saying that Theaetetus is something of a philosopher for his wonder shows this. And at this point, Socrates states some general truths about philosophy and wonder:

Theaetetus:

By the gods, Socrates, how greatly I wonder what these things are and sometimes when looking at them, I am really dizzy.

Socrates:

Theodorus seems to guess not badly about your nature, my friend. For this wonder is very much the undergoing of a philosopher. There is no other beginning of philosophy than this. And the one saying that Iris is the offspring of Thaumas did not make a bad genealogy. But do you begin to understand why these things are so?⁴⁴

⁴⁴Plato, *Theaetetus*, 155C-D

Socrates or Plato has given us something to wonder about in this text on wonder. (I suppose to see if we are something of a philosopher.) Why does Socrates say that he did not make a bad genealogy who said that Iris is the offspring of Thaumas? The Loeb edition has this note on that line:

Hes. *Theog.*. 780. Iris is the messenger of heaven and Plato interprets the name of her father as "Wonder".

In Homer, Iris is both the messenger of the gods and the rainbow personified. Hence, Shakespeare in the *Tempest* calls Iris a many colored messenger. There is a reason why Iris should be both of these. The messenger of the gods unites man with God and the rainbow unites heaven (the place associated with God) and the earth (the place of man). Hence, the reason why Socrates praises this genealogy is that wonder unites man and God in some way. Wonder makes one look for the cause and the cause of the cause and so on until one reaches the first cause. But the first cause is God. Hence. wonder unites man with God on the side of his reason. If wonder then is a desire that leads at last to and is satisfied by a knowledge of the first cause, and this is the goal of wisdom, then clearly the consideration of wonder belongs to the wise man.

Does it also belong to the wise man to consider docility (which is in the will) and any other dispositions of will or emotion that are necessary for learning from and investigating with others?

Since the wise man considers how one man is helped by another in the pursuit of truth (which Aristotle considers with how man is towards knowing truth), would it not also belong to him to consider those dispositions of will and emotions which are necessary in particular for learning from and investigating with others? This would seem to be a part of the consideration of the dispositions of the will and emotions necessary for the philosopher and that consideration already seems to belong to the philosopher since he considers wonder and the love of wisdom.

The wonder of the philosopher is the natural desire to know for its own sake the cause. In the text from the *Theaetetus*, it is significant that Theaetetus mentions the question *what* and Socrates the question *why*, because both of these questions are answered by the knowing the cause or causes. Aristotle shows this in his comparison of definition and demonstration in the second book of the *Posterior Analytics*. Hence, we could also define the wonder of the philosopher as the natural desire to know for its own sake what

and why. We define this desire by cause, or by what and why, because the desire of the philosopher must extend that far.

But since it is difficult to know what and why or to know the cause, this desire is not a sufficient beginning of philosophy without the *hope* of overcoming the difficulties in the way of knowing what and why. The wonder of the philosopher includes this hope or is not without it.

And just as there is in man a natural desire to know, so also there is man a natural aversion for error or being mistaken.⁴⁵ But this aversion or turning away from error is not enough for the philosopher without the reasonable *fear* of making a mistake. For error or mistake is difficult to avoid. This fear would seem to complete the wonder of the philosopher. Indeed, so much is this so, that Thomas often gives wonder as a species of fear.⁴⁶

Thus, the wise man's consideration of wonder involves a consideration not only of the natural desire in wonder (and the natural aversion for error), but also of the hope and fear without which the desire would be in vain. It is necessary to achieve a balance between the hope of coming to know the truth and the fear of mistake. The former without the latter would make one presumptuous and careless while the latter without the former would lead to despair. Sometimes the teacher must encourage the student and sometimes he must caution him.

The second matter to be considered by the wise man among the dispositions of will and emotion necessary for the philosopher is the love of wisdom.

The true philosopher must love wisdom *for its own sake*, not for the sake of honor or glory or power or anything else. If a man loves a woman for her money, he does not really love her. He should be called a lover of money. If a man loves wisdom for something else, he should be called a lover of his end - a lover of honor or power or whatever it is.

⁴⁵Thomas Aquinas, *De Unitate Intellectus Contra Averroistas,* Proemium, Opuscula Philosophica, ed. Marietti, n. 173: "Sicut omnes homines naturaliter scire desiderant veritatem, ita naturale desiderium inest hominibus fugiendi errores, et eos cum facultas adfuerit confutandi."

⁴⁶See, for example, *Summa Theologiae*, Prima Pars, Q. 41, Art. 4.

Not only must the philosopher love wisdom for its own sake, he must also love it more than anything else he loves for its own sake. If he loves music, for example, also for its own sake and more than wisdom, he would fittingly be called more a lover of music than a lover of wisdom.

If the true philosopher loves wisdom for its own sake and more than anything else he loves for its own sake, wisdom can rightly be called the end of his life.

The true philosopher then must love wisdom for its own sake, more than anything else, and as the very end or purpose of his life.

But since wisdom is most of all the knowledge of truth, one cannot be a lover of wisdom without being a lover of truth. The philosopher must love truth for its own sake and also as a common good.

And since wisdom is the highest perfection of reason, one cannot be a lover of wisdom without being a lover of reason. But there is, as Augustine said, an "immature and perverse love of reason." The true philosopher needs a mature and ordered love of reason. This is a love which takes into account the limits and the needs of reason.

And since reason is first defined by "looking before and after" and the culminating part of the description of the wise man is that he orders, it is clear that the love of wisdom is inseparable from the love of order.

There is another disposition of will which can be suitably considered along with the love of wisdom. This is humility.

Pythagoras is said to have been the first man to call himself a philosopher. The legend goes that his contemporaries had begun to call him wise and Pythagoras refused this title saying, "Don't call me wise; God alone is wise." When they asked him then what they should call him, he said a philosopher. Thus in the origin of the word, there is humility as well as the love of wisdom. And this is fitting since God alone is wise in the full sense. Without humility, a philosopher would seek to know more than mortal wisdom can attain. Since pride is the chief cause of error on the side of our will, humility is a most necessary virtue for the philosopher. The fear of being mistaken, of coming to

think you know when you do not, helps to keep the philosopher humble. We see this humility in all the great Greek philosophers.

Perhaps also the love of wisdom is not without a certain magnanimity of soul. Just as the desire in wonder must be confirmed by a balance between the hope of coming to know truth and the fear of mistake, so too the love of wisdom is rendered firm by magnanimity and humility.

Since one man by himself is not sufficient to acquire wisdom, it is also necessary for the wise man to consider those dispositions of will or emotion that are necessary in particular to learn from, or to investigate with, others. Foremost among these is the docility or teachableness which is in the will. (There is also a docility in reason.)

Docility is the firm disposition of will to hear or read carefully, frequently, and with reverence the words of those wiser than us in some matter. Since the wiser a man is, the more he says in fewer words, docility must increase in proportion to the wisdom of the teacher.

Laziness can make us indocile. The lazy student will not read carefully and frequently the words of those wiser than himself. Since the careful reading of the words of a wise man often requires us to learn a foreign language, laziness can easily be a major impediment to docility. Hence, docility is not without diligence in pondering the words of the wise.

Docility is also not found without humility. Humility is the moderation of our desire for excellence. It is more excellent to discover something by oneself than to learn it from another. Hence, out of an excessive desire for one's own excellence, one may be unwilling to learn from someone wiser than oneself in some matter. However, there are some things which we may never discover by ourselves. And if we try to discover everything by ourselves, we will not get very far in knowledge. Pride may lead us to scorn those wiser than us rather than reverence them.

Mildness, which is the moderation of anger, is necessary in philosophical conversations with others. We often get angry when a conversation reveals the deficiency in our understanding or when others are slow to recognize the force of our reasoning or the excellence of our thinking. Humility also helps us to be mild.

In the seventh book of *Natural Hearing* (the *Physics*), Aristotle reasons that the soul acquires reasoned out knowledge and foresight in quieting down. Thus, in general the tranquillity of all the emotions disposes for the good of reason.

Some kind of friendship would also seem to be necessary between those pursuing together wisdom and truth.

Thus, the consideration of the dispositions of will and emotion necessary in the life of the philosopher can be divided into three parts. The first part is about wonder; the second part centers around the love of wisdom; and the third part is about those dispositions necessary in particular for learning from, or investigating with, others.

Wonder and the love of wisdom are ordered first because they dispose man well towards knowledge and wisdom in themselves while the third group is because of the help which one man receives from another in the pursuit of knowledge and wisdom.

Wonder is considered before the love of wisdom even though the former is not as perfect as the latter because wonder, or at any rate, the desire in it, is more natural than the love of wisdom. Hence, Aristotle begins with the statement that all men by nature desire to know or understand and Plato in the *Theaetetus* calls wonder a *passio* or undergoing.⁴⁷ But the love of wisdom is more a chosen love. Hence, Aristotle says in the fourth book of *Wisdom*, that the philosopher differs from the sophist by choice. Since then nature is what is first in anything, it is appropriate to begin with wonder.

Perhaps wonder and the love of wisdom should be distinguished more fully here. Since wonder and the love of wisdom are alike and apt to be confused, it is useful here to distinguish them more fully and see their order. Since wonder is basically a desire and desire is for a good not had yet, the wonder which is the beginning of philosophy⁴⁸ diminishes as one acquires philosophy. As Aristotle says in the *Proemium to Wisdom*, the man who wonders thinks himself to be ignorant. But the love of wisdom, unlike a desire, is not diminished by the presence or the acquiring of wisdom. Rather it is increased

⁴⁷Plato, *Theaetetus*, 155D

⁴⁸ Wonder is sometimes used not for the desire to know, but for the admiration following upon knowledge of the excellence of something.

since love is increased when the object loved is had.⁴⁹ Thomas often makes this point and gives the reason for it:

Love causes a relation of the concupiscible to the good and hate, to the bad. For love makes the loved connatural with and as it were one with the loving, the contrary of which hate does. And because this relation is perfected by the presence of the object, therefore love in its perfection is of what is had, as Augustine says in his eighth sermon on Psalm 118.⁵⁰

And in another text, he says:

Love of some thing is not less when it is had but more because a good becomes more connatural to us when it is had...sometimes however the contrary happens by accident, as when we experience something in the loved which is repugnant to love; then it is less loved when it is had.⁵¹

There is an imperfect love or liking in desire, but when we distinguish the love of wisdom from wonder, we understand a perfect or complete love of wisdom. Thomas speaks of desire and love in this way:

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⁴⁹The philosopher is named from the love of wisdom rather than from wonder because of these reasons. The love of wisdom can be with or without wisdom although it is found more with wisdom. But the wonder which is the beginning of philosophy diminishes as reason comes to know the cause. But one is not less a philosopher when one has acquired some wisdom but more so. Hence, Thomas calls Aristotle *the philosopher* by antonomasia, not because of his desire to know, but because he is wiser than all the rest.

⁵⁰Scriptum Super Lib. III Sententiarum , Dist XXVI, Q. I, Art. III, Resp., n. 43: "Amor enim importat habitudinem concupiscibilis ad bonum, odium vero ad malum; quia amor amatum ponit connaturale et quasi unum cum amanti, cujus contrarium odium facit. Et quia haec habitudo perficitur ex praesentia objecti, ideo amor secundum perfectam sui rationem est habiti, ut Augustinus dicit (In Psal. CXVIII, serm. 8; L. 36, 1518)."

⁵¹ Summa Contra Gentiles, Liber I, Caput 91: "amor est alicuius rei non minus cum habetur, sed magis, quia bonum aliquod fit nobis affinius cum habetur...quandoque autem contrarium per accidens accidit, utpote quando in amato experimur aliquid quod repugnat amori: tunc enim minus amatur quando habetur..."

Desire and love differ in this way that love causes a certain agreement and connaturality to the loved, that is perfected when the loved is in some way had; desire however implies a movement towards a lovable not yet had. Whence the motion of the appetite begins in desire and ends in complete love. And therefore desire is a certain commencement of love and as it were an imperfect love.⁵²

In the following text (although in a discussion of hope and love in the theological virtues), Thomas does say something which is applicable to the order of the hope in philosophical wonder to the perfect love of wisdom:

And because the first having of a thing is according as it is within ability - because what is within one's capacity is considered to be had as it were already - therefore what first induces love is the capacity of having what is desired. And therefore love of a distant thing which is not had in act, presupposes hope. But because hope is not of anything except the good, and the first motion of appetite to the good is desire, therefore hope presupposes desire and is between love and desire.

And this happens reasonably. Because the irascible appetite is for the sake of the concupiscible, therefore the act of the irascible begins and ends in the concupiscible. For love and desire are in the concupiscible while hope is in the irascible; and there is a like order of them according as they are in the will. Whence it is clear that...desire...precedes hope, and hope, love.⁵³

⁵² Scriptum Super Lib. III Sententiarum, Dist. XXVI, Quaest. II, Art. III, Quaestiuncula II, Solutio II, n. 122: "desiderium et amor in hoc differunt quod amor importat quamdam convenientiam et connaturalitatem ad amatum, quod quidem perficitur dum amatum aliquo modo habetur; desiderium autem importat motum in ipsum amabile nondum habitum. Unde motus appetitus incipit in desiderio et terminatur in amore completo. Et ideo desiderium est quaedam inchoatio amoris et quasi quidam amor imperfectus.

⁵³ Scriptum Super Lib. III Sententiarum, Dist. XXVI, Quaest. II, Art. III, Quaestiuncula II, Solutio II, nn. 122-124: "Sed quia primum habere rei est secundum quod est in potentia - quia quod est in facultate, quasi jam haberi reputatur - ideo primum quod amorem inducit, est facultas habendi id quod desideratur. Et ideo amor rei distantis quae in actu non habetur, praesupponit

Men are not apt to love fully what they despair of getting. If one has no hope of coming to know causes or, in particular, the first cause, one is apt to cease loving such knowledge altogether.

Aristotle has even less of a separate or full consideration of the dispositions of will and emotion necessary for the philosopher than he did of the secondary matters of wisdom. And this is reasonable in that these matters are third in place. What is most essential to knowledge and wisdom is what is known. Then, how it is known. And then the desire and love of knowing things in that way. Yet all are necessary.

But in the Proemium, he notes that men begin to philosophize out of wonder, that there is an order in which they wonder about things, and that this wonder will diminish and disappear as we come to know.

And in the fourth book, he points out that the philosopher differs from the sophist by choice of life.⁵⁴ The sophist would like to appear wise so as to receive honor and even money from this appearance. But the philosopher loves wisdom for its own sake.

Just as the first matters of wisdom and the second matters were each three in number, so too, the third matters of wisdom seem to be three in number.⁵⁵

spem. Sed quia spes non est nisi boni, et primus motus appetitus in bonum, est desiderium; ideo spes praesupponit desiderium et est media inter amorem et desiderium."

Et hoc rationabiliter accidit. Quia enim irascibilis est propter concupiscibilem, ideo actus irascibilis a concupiscibili incipit et in concupiscibili terminatur. Amor enim et desiderium in concupiscibili sunt, spes autem in irascibili; et similis est eorum ordo secundum quod sunt in voluntate. Unde patet quod...desiderium...praecedit spem, spes autem amorem."

⁵⁴*Metaphysics*, Book 4, 1004b 22-26

⁵⁵These matters center around wonder, the love of wisdom, and docility.

PART FOUR

Most of the order of the *Metaphysics* can be seen from the order in which it is shown what it is first and chiefly about and the order in which these are taken up. The order of the Proemium at the beginning of Book One and Books Four through Fourteen can be seen almost entirely from these two orders. We learn from the Proemium that wisdom is about causes and most of all about the first causes (as its goal). And from this, Aristotle reasons in the beginning of Book Four that wisdom is about being and one (as its subject). And next, he reasons from this that wisdom is about the axioms. He then considers the axioms in the rest of Book Four (and to some extent in Book Five). And in Books Five through Ten he considers being as being and the one and the many. Books Eleven through Fourteen are ordered to a knowledge of the first causes. And in both of these orders, as we have seen, Aristotle proceeds from what is more known to us to what is less known to us.

What is not explained by this is Book One after the Proemium, Books Two and Three, the beginning of Book Six (where wisdom is distinguished from the other forms of reasoned out knowledge) and the beginning of Book Seven (where the way and order of considering substance is determined). Now some of this is explained by the three secondary matters of wisdom: how man is towards knowing truth, the ways of knowing or coming to know truth, and the distinction of wisdom and the other forms of reasoned out knowledge of truth and the order of learning them. The beginning of Book Two is about how man is towards knowing truth. The end of Book Two, the beginning of Book Three and the beginning of Book Seven are about the ways of knowing or coming to know truth. The beginning of Book Six is about the distinction of wisdom from the other forms of reasoned out knowledge and especially from the other parts of looking philosophy. The middle of Book Two gives the reason why it belongs to the wise man to know how man is towards truth and the ways of knowing or coming to know truth. And the order of these by themselves makes sense. For one must see how man is towards knowing truth before one can determine the ways of knowing or coming to know truth. And part of the reason why there are different forms of reasoned out knowledge is because there are different ways of knowing. Hence, Aristotle distinguishes the three looking philosophies (natural philosophy, mathematics and wisdom) by their diverse ways of defining.

The way and order of considering substance can come after the last because it is somewhat more particular than wisdom as a whole.

Book One after the Proemium and Book Three after the discourse on the necessity of doubting well to discover and to be prepared for judging do not bring in other matters. For in Book one after the Proemium, Aristotle considers what his predecessors have said about first causes. And in Book Three, after seeing the need to doubt well, Aristotle doubts well as regards what wisdom is about and he doubts well about the things to be considered in wisdom (especially about substance and the first causes).

The reason for Book One (after the Proemium) is to determine whether one can learn wisdom from one's predecessors. If they have arrived sufficiently at the goal of wisdom, we should learn from them. But if they have not, we must discover the truth ourselves although not without their help. The conclusion from Book One is that none of the earlier philosophers has arrived sufficiently at a knowledge of the first causes. Hence, Aristotle must discover the truth himself. And in the beginning of Book Three, he shows the need to doubt well by dialectic before discovery can be made and before we are ready to judge. Aristotle does something similar to this in other books. The first book About the Soul (the De Anima) and the second book of the Politics are similar in having a whole book devoted to the examination of what earlier thinkers have said. But what is unique to wisdom in comparison to these two is that the discourse to determine whether one can learn from his predecessors and not discover by oneself is separated from the dialectical proceeding from what they said with a view to discovery and eventually to judging. For Book One after the Proemium is ordered to finding whether the earlier philosophers have arrived at a sufficient knowledge of the causes that one can take them as teachers of wisdom while Book Three uses what they said to begin the process of discovery. One of these reasons which Aristotle gives in the Politics (which is a wisdom not simply, but in the genus of human things) seems even more applicable to wisdom:

Since we have chosen to consider which political community is the best for those able to live especially according to desire, it is necessary to examine the constitutions which are used by cities said to be well ruled and some others spoken of by some which seem to be good, in order that one might see what is rightly established and useful, but further that to seek something other besides these will not seem to belong to one wishing to be

sophistical, but we will seem to have set out upon this knowledge over a road on account of the existing ones not being good.⁵⁶

The second reason given here is even more applicable to one pursuing wisdom (for political philosophy is only wisdom *secundum quid.*). This perhaps explains in part why there is a separate consideration devoted to this in wisdom. The philosopher differs from the sophist by choice. The true philosopher does not disdain to learn from another and *not* have the glory or honor of having discovered something by oneself. The true philosopher loves knowledge and wisdom much more than the honor of having been the first man to discover something. And one can come to know more by learning from others than by discovering everything by oneself. The true philosopher's attitude must be that of Aristotle in the beginning of the thirteenth book of *Wisdom* or *First Philosophy:*

First one ought to consider the things said by others, so that we will not be bound by what they do not say well, and if some opinion is common to them and us, this will not displease us in private. For it is lovable if someone says some things better and some things no worse.⁵⁷

We find a similar pair of reasons for the consideration of the opinions of earlier thinkers on the soul in the first book *About the Soul*

It is necessary considering the soul and doubting about those things which in going forward should be discovered, to take together the opinions of earlier thinkers who have said something about it, in order that we might take what is well said and beware of what is not said well.⁵⁸

⁵⁷Metaphysics, Book Thirteen (M), 1076a 12-16

⁵⁸De Anima, Book One, 403b 20-24 Thomas lays this out thus In Aristotelis Librum de Anima, Liber Primus, Lectio II, n. 30: "De qua," scilicet anima, intendentes ad praesens necesse est accipere opiniones antiquorum, quicumque sunt qui aliquid enunciaverunt de ipsa. Et hoc quidem ad duo erit utile. Primo, quia illud quod bene dictum est ab eis, accipiemus in adiutorium nostrum. Secundo quia illud, quod male enunciatum est, cavebimus."

⁵⁶*Politics*, Book 2, 1260b 27-37

But in the consideration of how man is towards knowing truth and in particular there as to how one is helped by another, Aristotle had pointed out that we must be thankful not only for those from whom we got some part of the truth, but even for those whose mistakes we reasoned against.⁵⁹ For reason develops not only by the truth it knows, but also by the refutation of errors opposed to the truth.

Thus there are at least three reasons why it is useful to see the mistakes of earlier thinkers and to reason against them. First, we will see that we cannot just learn the subject from them, but we or someone else must discover it. Second, we will be wary of these mistakes and not be bound by them. And third, we will exercise our reason by arguing against them and perhaps using them dialectically.

Aristotle himself has given fully the reasons for the dialectic of Book Three at the beginning of that book:

It is necessary, towards the reasoned out knowledge sought, for us to go first through the things about which one ought to doubt first. These are whatever things about which some have taken up opposite positions and whatever else besides these happens to have been overlooked.

To doubt well is useful for those wishing to discover. For the discovery after is an untying of the doubts before. But it is not possible for those ignorant of the knot to untie it. But the doubt of reason shows this about the thing. Insofar as it doubts, it undergoes something like those tied. It is impossible for either to go forward.

Hence, it is necessary to have considered all the difficulties before on account of these things and because those seeking without doubting first are like those who do not know where one ought to go and further they do not know whether the sought has been found or not. For the end is not clear to such a one, but it is clear to the one who has doubted before.

⁵⁹Metaphysics, Book Two, 993b 11-14

Further, one who has heard all the arguments of those disputing, like that of parties in a lawsuit, is necessarily in a better position to judge.⁶⁰

What is clear from this consideration of Book One after the Proemium and Book Three is that they do not introduce other matters for the wise man to consider (unless someone were to say that the opinions of others is a further matter). But perhaps it is better to understand these parts of the books in wisdom in the light of the ways of coming to know truth. In particular, the distinction between coming to know by learning from another who already knows and discovery by oneself and the necessity of deciding which of these to follow explains a main reason for Book One after the Proemium. And when it is clear that Aristotle must discover, he considers what is necessary to discover in the beginning of Book Three and then proceeds accordingly in the rest of the book. But Book Three, in its order to the later books, must also be understood in the light of the second road in our knowledge which is the road from reasonable guesses to reasoned out knowledge. Dialectic which reasons from reasonable guesses, or probable opinions, has a road to the beginnings of all reasoned out knowledge as Aristotle teaches in the *About Places (Topics)*. ⁶¹

We must now attempt to answer the question asked in Part Two of why Book Two comes between the discourse of Book One after the Proemium which shows that Aristotle cannot simply learn wisdom from the thinkers before but must discover it himself and Book Three which begins with subtle and profound teaching on how we discover and begins that process. Why is seeing the need to discover not followed immediately by a consideration of how to discover by doubting well and the doubting well itself (which occupies the rest of Book Three)? The second surely comes after the first, but why not *immediately* after.

The answer to this question must take into account the three parts of Book Two in their connection with Book One and Book Three. And it should also take into account the connection of Books One through Three with the role of the will and emotions in philosophy.

Thomas Aquinas shows why an understanding of the third part of Book Two is presupposed to an understanding of the division and order of the dialectic of Book Three. We learn in the third part of Book Two that one cannot

⁶⁰ Metaphysics, Book B, 995a 24-995b 4

⁶¹ Topics Book I, 101b 2-4

at the same time acquire a reasoned out knowledge and the way of that reasoned out knowledge, and that we must know the way of a reasoned out knowledge before we can acquire well that reasoned out knowledge. Further, we learn that we cannot acquire the way of a reasoned out knowledge by following our customary way of thinking, but we must find the way which fits the matter or subject of that reasoned out knowledge. Hence, we must determine what a reasoned out knowledge is about before we can determine its way. This is why the dialectic of Book Three is divided into two parts. The first part concerns what wisdom is about and the second pertains to the things which wisdom is about.

But the first and third parts of the second book are also important to see why one must discover by doubting well. In the first part, we see how there are two causes of difficulty in knowing. One is in things and the other is in us, in the weakness of our reason. And in the third part, we learn that the certitude and the precision of mathematics should not be sought everywhere. Natural philosophy and practical philosophy are more difficult and less certain than mathematics because of the first cause, wisdom or first philosophy is more difficult because of the second cause. Hence, the first part of Book Two gives the beginning for understanding why one cannot have the certitude and precision of mathematics in either natural philosophy or wisdom. The certitude of mathematics is such that one does not need to doubt well before discovery. Even before one sees the rigorous proof that the angles opposite the equal sides of a triangle must be equal, one would suspect this. Men would not be apt to have opposite opinions about this or reasons for opposite opinions about the matter. One would guess that it is so and then seek the rigorous proof that it is so. But in natural philosophy and in metaphysics because of their greater difficulty than mathematics (due to other causes), men are apt to have contrary opinions and reasons for them. Descartes is a witness to this. He sought on the one hand to have the certitude of mathematics everywhere and on the other hand he rejected the need for dialectic in coming to know things. What Aristotle says then about the need to doubt well before discovery and judgment applies to reasoned out knowledge other than mathematics.

The first part of Book Two also provides us with a general understanding that men are apt to see a part of the truth before the whole and that one man is helped by another in the pursuit of truth. And the need for dialectic presupposes this general understanding. Men disagree often because they see only a part of the truth. And in dialectic, one man is helped by another.

In the middle part of Book Two, Aristotle kills two birds with one stone, just as he did in narrating the opinions of his predecessors and their reasons in Book One. In the first part of Book One after the Proemium, he narrated the opinions of his predecessors on the causes and their reasons. This is obviously necessary before discussing the truth of those opinions and the adequacy of those reasons. But in narrating their opinions, Aristotle was also interested in seeing if they touched upon any kind of cause other than the four distinguished in natural philosophy. He finds in their opinions, confirmation that there are only those four kinds of cause. In the middle part of Book Two, he shows that there are first causes in these four kinds of cause. If there were not, wisdom could not be a knowledge of first causes. The proemium in the beginning of Book One has two parts. In the first part, Aristotle shows what is the goal of wisdom; and in the second, he shows the kind of knowledge that is wisdom. But he shows the goal in two steps or stages. First he shows that wisdom is about causes and then he shows that it is about the first causes or cause. Now apart from the rule of going from the general to the particular in determining the goal of wisdom, it is also appropriate that wisdom be said to be about causes in general. For it would seem to belong to wisdom most of all to determine how many kinds of cause there are. Since the first causes are most of all causes, the consideration of causes belongs most of all to the wise man. It is important then that the wise man confirms that there are four kinds of cause in Book One. And that there are first causes is important, not only for wisdom, but for logic and natural philosophy and ethics and the whole of philosophy.62

Thus, in the first part of Book One after the Proemium and in the middle part of Book Two, there is a certain advance toward the goal of wisdom. We learn that there are four kinds of cause and that in each of these there is a first cause. Hence, the first cause must be sought in one or more of these kinds.⁶³ In this respect, Books One and Two are to Book Twelve in their consideration of causes something like Book One of the *Nicomachean Ethics* to Book Ten of that work in their consideration of happiness. One encircles in a confused way what

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⁶²Of course, in the line of manuductio, one sees in a many particular ways, in logic and natural philosophy and ethics, that there are first causes.

⁶³The first cause turns out to be a cause in two and half of the four kinds of cause. God is the first mover and maker and also the last end of all things. He is also a cause of things in the sense of exemplar, but not of intrinsic form. But he cannot be a cause in the sense of matter for matter is ability or potency and the first cause is pure act.

one seeks to know and then later through the consideration of other things, one is able to know more distinctly what one seeks to know.

But Aristotle's procedure also helps us to balance the fear of being mistaken with the hope of finding the truth and coming to know it. We learn from the proemium that wisdom is difficult and not a human possession. And then, when we meet the diversity of opinions about the causes and the failure of those who have sought a knowledge of the first causes to arrive at them, we are apt to despair of coming to know them. But in meeting the diverse opinions of the earlier thinkers, we are confirmed in there being just four kinds of cause. We know that there are four kinds of cause and that the first cause(s) must be found in one or more of these genera. And in the middle of the second book, we even arrive at the first causes in some way, at least at their existence.⁶⁴ Thus Aristotle balances hope and fear. Our fear of mistake is raised by the diversity of opinions and the insufficiency of those who have tried to arrive at the first causes. But our hope of so arriving is strengthened by the confirmation that we can know the kinds of cause and we do have good reasons for thinking that there is a first cause in each kind of cause.

The first part of Book Two also helps to balance hope and fear. For we learn not only how difficult truth is and the causes of this difficulty, but we also learn that in three ways it is easy and how one man (not only the man who has discovered something but also the one who is mistaken) can help another to acquire truth.⁶⁵

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We have distinguished the first and chief matters of wisdom, the second matters and the third matters. We have also tried to give some of the reasons why these are the matters of wisdom. We have considered the orders in which these matters should be considered and some of the reasons for those orders. And we have considered the light which the *Metaphysics* of Aristotle, the

⁶⁴So far does the middle of Book Two take us to knowing the first cause that Thomas in the *Summa Theologiae* can use it in establishing the existence of God.

⁶⁵And in the beginning of Book Three, we begin to see how even the contrariety of opinions and the contradictions to which they lead can help us to discover and know that we have found something and even prepare us to judge between truth and falsity

fourteen books of *Wisdom* or *First Philosophy*, casts upon these and the light which they cast upon the order of the fourteen books. Are there any other matters of wisdom?⁶⁶ We leave this question to the reader.

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⁶⁶Someone might ask whether the influence of custom and fashion upon our thinking is another matter for the wise man to consider. However, Aristotle considered the influence of custom upon how we think in the third part of the Second Book. There is the same knowledge of opposites so he determines there both how we should and should not determine the road to follow in any reasoned out knowledge. Custom can also make something which is not obvious seem obvious, whether it is true, but in need of proof, or even false. Where would the wise man consider this? It seems connected with the consideration of the axioms which are truly obvious or known through themselves. Custom can also kill wonder and fashion disorder wonder. Hence, these pernicious effects of custom and fashion belong to the consideration of wonder.