QUESTION 85

The Mode and Order of Intellective Understanding

Next we have to consider the mode and order of intellective understanding. And on this topic there are eight questions: (1) Does our intellect have intellective understanding by abstracting species from phantasms? (2) Are the intelligible species abstracted from the phantasms related to our intellective understanding as *that which* is understood or as *that by which* something is understood? (3) Does our intellect by its nature first have intellective understanding of what is more universal? (4) Can our intellect have intellective understanding of many things at once? (5) Does our intellect come to intellective understanding be mistaken? (7) Is it possible for someone to understand the same thing better than someone else? (8) Does our intellect understand what is indivisible prior to what is divisible?

Article 1

Does our intellect have intellective understanding of corporeal and material things through abstraction from phantasms?

It seems that our intellect does not have intellective understanding of corporeal and material things through abstraction from phantasms (*per abstractionem a phantasmatibus*):

Objection 1: If an intellect understands a thing otherwise than it is, then it has falsity. But the forms of material things are not abstracted from the particulars whose likenesses the phantasms are. Therefore, if we understand material things by means of the abstraction of species from phantasms, then falsity will exist in our intellect.

Objection 2: Material things are natural things that have matter as part of their definition (*in quarum definitione cadit materia*). But nothing can be understood intellectively in the absence of something that is part of its definition. Therefore, material things cannot be understood without matter. But matter is a principle of individuation. Therefore, material things cannot be understood by means of the abstraction of a universal from a particular—which is what it is to abstract intelligible species from phantasms.

Objection 3: *De Anima* 3 says that phantasms are related to the intellective soul in the way that colors are related to the power of vision. But an act of seeing occurs not by means of an abstraction of species from colors, but by the colors' leaving an impression on the power of vision (*per hoc quod colores imprimunt in visum*). Therefore, it is impossible to have intellective understanding by means of something's being abstracted from phantasms; instead, it must be had by means of the phantasms' leaving an impression on the intellect (*per hoc quod phantasmata imprimunt in intellectum*).

Objection 4: *De Anima* 3 says that there are two [cognitive powers] in the intellective soul, viz., the passive intellect and the active intellect (*intellectus possibilis et agens*). But the passive intellect's function is to receive the species that have already been abstracted and not to abstract the intelligible species from phantasms. Nor does abstracting the species belong to the active intellect. For the active intellect is related to the phantasms in the way that light (*lumen*) is related to colors; but light flows into the colors rather than abstracting anything from them (*non abstrahit aliquid a coloribus sed magis eis influit*). Therefore, there is no way in which we have intellective understanding by means of abstraction from phantasms.

Objection 5: In *De Anima* 3 the Philosopher says, "The intellect *understands* species in the phantasms"—and thus does not *abstract* them.

But contrary to this: De Anima 3 says, "Things are susceptible to intellective understanding

(*circa intellectum sunt*) insofar as they are separable from matter." Therefore, it must be the case that material things are understood intellectively insofar as they are abstracted from matter and from material likenesses, i.e., phantasms.

I respond: As was explained above (q. 84, a. 7), an object of cognition (*objectum cognoscibile*) is proportioned to the relevant cognitive power. Now there are three levels of cognitive power:

For there is a cognitive power, viz., *the sensory power*, that is the act of a corporeal organ. And so the object of any sentient power is *a form insofar as it exists in matter*. And since matter of this sort is a principle of individuation, it follows that every power of the sentient part of the soul has cognition only of particulars.

On the other hand, there is a cognitive power, viz., *the angelic intellect*, which is not the act of a corporeal power and is not conjoined in any way with corporeal matter. And so the object of this sort of cognitive power is a form that subsists without matter; for even though the angels have cognition of material things, they nonetheless have their intuitive vision of them (*ea intuentur*) 'in' immaterial things, viz., in themselves and in God (cf. q. 84, a. 5).

By contrast, human understanding (*intellectus humanus*) is situated in the middle. For as is clear from what was said above (q. 76, a. 1), human understanding is not the act of any [corporeal] organ. Yet it is a certain power belonging to a soul that is the form of a body, and so it is proper to it to have cognition of forms that exist individually in corporeal matter, though not insofar as they exist in such matter. But to have a cognition of what exists in a material individual, but not insofar as it exists in such matter, is to abstract the form from the individual matter represented by the phantasms. And so it is necessary to say that our intellect has intellective understanding of material things by abstracting from the phantasms. And it is through material things considered in this way that we come to have a certain sort of cognition of immaterial things —just the opposite of the way that angels have cognition of material things.

However, Plato, who paid attention only to the immateriality of the human intellect, but not to the fact that it is united in some way to a body, claimed that the objects of the intellect are separated ideas and that we have intellective understanding not by abstracting but rather by participating in abstract entities. This was explained above (q. 84, a. 1).

Reply to objection 1: There are two ways in which it is possible to abstract: *first*, in the *mode of composition and division*, as when we understand intellectively that one thing does not exist in another, or that it is separated from it; *second*, in the *mode of simple and absolute consideration*, as when we have an intellective understanding of the one thing without considering the other at all.

Thus, in the *first* mode of abstraction, it involves falsity to abstract through intellection things that are not abstracted in reality (*secundum rem*). By contrast, in the *second* mode, it does not involve falsity to abstract through intellection things that are not abstracted in reality, as is manifestly obvious in the case of sensible things. For instance, if we think or say (*si intelligamus vel dicamus*) 'No color exists in a body that is colored', or 'Color is separated from a body that is colored', there will be falsity in what we think or in what we say (*in opinione vel in oratione*). On the other hand, if we are considering a color and its properties, paying no attention at all to the apple that is colored, then what we think or orally express in so doing will involve no falsity in thought or speech. For an apple is not part of the nature of a color (*pomum not est de ratione coloris*), and nothing prevents the color from being thought of without the apple's being thought of at all. Similarly, I claim that what belongs to the nature (*ratio*) of any species of material thing, e.g., *rock* or *man* or *horse*, can be considered without the individual principles, which do not belong to the nature (*ratio*) of the species. And to abstract the universal from the particular, or to abstract the intelligible species from the phantasms, is just this: to consider the nature (*natura*) of the species without considering the individual principles that are represented through the phantasms.

Therefore, when one says, 'An intellect has falsity when it understands a thing otherwise than it is',

the sentence is true if 'otherwise' refers to the thing that is understood. For the intellect has falsity when it understands a thing to be otherwise than it is. Hence, the intellect would have falsity if it abstracted the species of a rock from matter in such a way that it understood this species not to exist in matter, as Plato posited.

However, the proposition 'The intellect has falsity when it understands a thing otherwise than it is' is not true if 'otherwise' is referred to the one who is doing the understanding (*accipiatur ex parte intelligentis*). For there is no falsity involved in the fact that the mode of the one who understands is, in his understanding, different from the mode of the thing in its existing. For in the one who is doing the understanding, the thing that is understood exists immaterially, in the manner of an intellect, and not materially, in the manner of a material thing.

Reply to objection 2: Some have thought that the species of a natural thing is the form alone, and that the matter is not part of the species. But according to this view, matter would have no place in the definitions of natural things.

And so one should reply in an alternative way that there are two types of matter, viz., (a) *common matter* and (b) *designated* (or *individual*) matter (*materia communis et signata vel individualis*)—where common matter is, e.g., *flesh* and *bone*, and individual matter is, e.g., *this flesh* and *these bones*.

Thus, the intellect abstracts the species of a *natural* thing from *individual* sensible matter, but not from *common* sensible matter. For instance, it abstracts the species *man* from *this* flesh and *these* bones, which, as *Metaphysics* 7 points out, are not part of the nature of the species but are instead parts of the individual; and so the nature can be thought about without them. However, the species *man* cannot be abstracted by the intellect from *flesh* and *bones*.

By contrast, *mathematical* species can be abstracted by the intellect not only from *individual* sensible matter but also from *common* sensible matter—and yet not from common *intelligible* matter, but only from individual *intelligible* matter. For sensible matter is called 'corporeal' matter insofar as it is subject to sensible qualities like hot and cold, hard and soft, and so on, whereas what is called intelligible matter is a substance insofar as it is subject to quantity. Now it is clear that quantity exists in a substance prior to its sensible qualities. Hence, quantities such as numbers, dimensions, and shapes (which are the limits of quantities) can be thought about without sensible qualities—which is what it is to abstract them from sensible matter. Now these quantities cannot be thought about without an understanding of a substance's being the subject of quantity—which would be to abstract them from *common* intelligible matter. But they can indeed be thought about without *this* or *that* substance—which is to abstract them from *individual* intelligible matter.

On the other hand, there are certain [species], e.g., *being*, *one*, *potentiality*, *actuality*, and others of this sort, that can be abstracted even from common intelligible matter. These can exist without any matter at all, as is clear in the case of immaterial substances.

And because Plato did not take into account what was said above about the two modes of abstraction, he posited as abstract entities, existing in reality, all the things that we have claimed to be abstracted by the intellect.

Reply to objection 3: Colors have the same mode of existing in a material corporeal individual as the power of sight does, and so colors can impress their likeness on the power of sight. But as is clear from what has been said, since phantasms are likenesses of individuals and exist in corporeal organs, they do not have the same mode of existing that the human intellect does. And so they cannot by their own power leave an impression on the passive intellect. Rather, by the power of the active intellect, a certain likeness results in the passive intellect from the active intellect's turning toward the phantasms; and this likeness is representative of those things that the phantasms are about, though only with respect to the nature of their species. This is the sense in which the intelligible species is said to be abstracted from the phantasms—and not in the sense that numerically the same form at first existed in the

phantasms and later comes to exist in the passive intellect, in the way that a body is taken from one place and transferred to another.

Reply to objection 4: It is the case both that (a) the phantasms are illuminated by the agent intellect and, again, that (b) the intelligible species are abstracted from them by the power of the active intellect.

They are *illuminated* in the sense that just as the sentient part of soul is made more powerful by being conjoined to the intellect, so by the power of the active intellect the phantasms are rendered suitable for intelligible intentions to be abstracted from them.

And the active intellect *abstracts* the intelligible species from the phantasms in the sense that (a) by the power of the active intellect we are able, in our thinking, to grasp the natures of the species without their individual conditions, and that (b) the passive intellect is informed by the likenesses of these natures.

Reply to objection 5: On the one hand, our intellect *abstracts* intelligible species *from* the phantasms insofar as it considers the natures in general (*in universali*); on the other hand, it *understands* them *in* the phantasms, since, as was explained above (q. 84, a. 7), it is unable to understand even the things whose species it abstracts except by turning itself to the phantasms.

Article 2

Are the intelligible species abstracted from the phantasms related to our intellect as *that which* is understood intellectively?

It seems that the intelligible species abstracted from the phantasms are related to our intellect as *that which (id quod)* is understood intellectively:

Objection 1: A thing which is actually being understood (*intellectum in actu*) exists in the one who is engaged in understanding, since a thing which is actually being understood is the intellect itself insofar as it is acting (*ipse intellectus in actu*). But nothing of the things which is being understood, except the abstracted intelligible species, exists in an intellect actually engaged in understanding. Therefore, it is a species of this sort that is the very thing which is actually being understood.

Objection 2: A thing which is actually being understood has to exist in something; otherwise, it would be nothing at all. But it does not exist in the thing that is outside the soul; for since the thing outside the soul is material, nothing that is in it can be a thing which is actually being understood. Therefore, it follows that what is actually being understood exists in the intellect. And so the thing which is actually being understood is nothing other than the aforementioned intelligible species.

Objection 3: In *Perihermenias* 1 the Philosopher says, "Spoken words (*voces*) are signs of things received in the soul (*notae earum quae sunt in anima passionum*)." But spoken words signify the things which are understood; for we signify by spoken words what we understand intellectively. Therefore, the things received in the soul (*passiones animae*), i.e., the intelligible species, are themselves the things which are actually understood.

But contrary to this: Intelligible species are related to the intellect in the way that sensible species are related to the sensory power. But a sensible species is *that by which (id quo)* the sensory power senses and not *that which (illud quod)* is sensed. Therefore, the intelligible species is that *by which* the intellect understands intellectively and not *that which (quod)* is understood.

I respond: Some have claimed that the cognitive powers that exist in us have cognition of nothing except what they receive within themselves (*nihil nisi proprias passiones*); for instance, they claim that a

sensory power senses only what is received in its corresponding organ (*passionem sui organi*). On this view, the intellect has intellective understanding of nothing except what is received within itself, i.e., the intelligible species received within it (*nisi suam passionem, idest speciem intelligibilem in se receptam*). Accordingly, this sort of species is itself what is understood.

However, there are two reasons why this opinion is manifestly false.

First, the things we have intellective understanding of are the same things that scientific knowledge is about. Therefore, if the things we have intellective understanding of were just the species that exist in the soul, then it would follow that all types of scientific knowledge are not about things that exist outside the soul, but only about the intelligible species that exist within the soul—just as, according to the Platonists, all types of scientific knowledge are about the ideas, which they claimed to be the things which are actually understood.

Second, this would entail the error of those ancients who claimed that "whatever seems to be the case is true," with the result that contradictories would be simultaneously true. For if a power has cognition only of what it receives within itself (*non cognoscit nisi propriam passionem*), then that is all it makes judgments about. But something seems to be the case insofar as the cognitive power is affected in a given way. Therefore, the cognitive power's judgment will always be a judgment about what it itself receives as such (*de propria passione, secundum quod est*); and so every judgment will be true. For instance, if the sense of taste senses only what it itself receives, then when someone with a healthy sense of taste judges that honey is sweet, he will be judging correctly; and, similarly, when someone with a diseased sense of taste judges that honey is bitter, he will be judging correctly. For each of them judges in accord with how his own sense of taste is affected. And so it follows that every opinion—and, in general, every instance of accepting a proposition (*omnis acceptio*)— will be equally true.

Therefore, one should reply instead that an intelligible species is related to the intellect as *that by which* (*quo*) the intellect has intellective understanding. This is made clear as follows:

As *Metaphysics* 9 says, there are two kinds of action, one of which *remains within the agent (manet in agente)*, e.g., seeing and understanding intellectively, and the other of which *passes into an exterior thing (transit in rem exteriorem)*, e.g., heating and cutting. Both kinds of action stem from some form. And just as the form from which an action tending toward an exterior thing arises is a likeness of the action's object—in the way that a heating agent's heat is a likeness of the thing that is made hot (*ut calor calefacientis est similitudo calefacti*)—so, similarly, the form from which an action remaining within the agent arises is a likeness of the object. Thus, the likeness of a visible thing is that in virtue of which the power of sight sees, and the likeness of a thing that is understood, i.e., the intelligible species, is the form in virtue of which the intellect has intellective understanding.

However, since the intellect reflects upon itself (*supra seipsum reflectit*), it is by the same act of reflection (*secundum eandem reflexionem*) that it understands both its own act of intellective understanding (*suum intelligere*) and the species by which it understands intellectively (*speciem qua intelligit*). And so the intellective species is in a secondary sense that which is understood intellectively. But that which is understood intellectively in the primary sense is the thing of which the intelligible species is a likeness.

This point is also made clear by the opinion of the ancients, who claimed that like is known by like. For they claimed that it is through the element earth that exists within the soul that the soul has cognition of the element earth as it exists outside the soul—and so on for the other elements. Therefore, if we substitute the intelligible species of the element earth for the element itself—in accord with the teaching of Aristotle, who said that "it is not a rock, but the species of a rock that exists within the soul"—then it will follow that it is by means of intelligible species that the soul has cognition of things that exist outside the soul.

Reply to objection 1: It is through its likeness that the thing which is being understood

intellectively exists in the who is engaged in understanding. The sense in which it is said that a thing which is actually being understood is the intellect itself insofar as it is acting, is that a likeness of the thing which is being understood is the form of the intellect in the same way that the likeness of a sensible thing is the form of a sensory power that is acting. Hence, it does not follow that the abstracted intelligible species is the thing which is actually being understood; rather, what follows is that the abstracted intelligible species is a *likeness* of the thing which is actually being understood.

Reply to objection 2: When one says 'a thing which is actually being understood' (*intellectum in actu*), there are two things implied, viz., (a) the thing which is being understood and (b) the very fact of its being understood. Similarly, when one says 'the abstracted universal', there are two things implied, viz., (a) the nature itself of the thing and (b) its abstractness or universality.

Therefore, the nature which happens to be understood intellectively or to be abstracted, or to which the intention of universality accrues, does not itself exist except in singular things; but the intention of universality, or the very fact of the nature's being understood or abstracted exists in the intellect.

We can see this by a comparison with a sensory power. For the power of sight sees the color of an apple without seeing its smell. Therefore, if someone asked where the color is that is seen without the smell, it is obvious that the color which is seen exists only in the apple; however, the fact that it is perceived without its smell accrues to it because of the power of sight, since within the power of sight there exists a likeness of its color but not of its smell.

Similarly, the human-ness (*humanitas*) that is understood intellectively exists only in this or that man; but the fact that human-ness is apprehended without individual conditions—i.e., the fact that human-ness is abstracted, and that an intention of universality results from this—happens to human-ness insofar as it is perceived by the intellect, in which there is a likeness of the nature of the species without a likeness of the individual principles.

Reply to objection 3: There are two types of operation in the sentient part of the soul. One involves just [the sensory power's] *being affected (immutatio)*, and on this score the sensory power's operation is perfected by its being affected by the sensible thing. The second operation is [the sensory power's] *being formed (formatio)*, insofar as the power of imagining forms for itself an image (*idolum*) of an absent thing or even of a thing that has never been seen.

These two types of operation are joined together in the intellect. For the first thing to consider is the passive intellect's being acted upon insofar as it is informed by the intelligible species (*passio intellectus possibilis secundum quod informatur specie intelligibili*). Once it is formed by the intelligible species, it forms, in the second place, a definition or composition or division that is signified by spoken words.

Hence, the concept (*ratio*) that the spoken name (*nomen*) signifies is the definition. And the spoken sentence (*enuntiatio*) signifies the intellect's composition or division. Thus, it is not the case that spoken words signify the intelligible species themselves; instead, they signify the things that the intellect forms for itself in order to make its judgments about exterior things (*ea quae intellectus sibi format ad iudicandum de rebus exterioribus*).

Article 3

Is what is more universal prior in our intellective cognition?

It seems that what is more universal is not prior in our intellective cognition (*magis universalia non* sint priora in nostra cognitione intellectuali):

Objection 1: What is prior and better known by its nature (secundum naturam) is posterior and

less well known as far as we are concerned (*quoad nos*). But universals are prior and better known by their nature, since "what is prior is such that there is no valid inference from it [to what is posterior] with respect to subsistence." Therefore, universals are posterior in our intellect's cognition.

Objection 2: Composites are prior to simples as far as we are concerned. But universals are more simple. Therefore, they are known later as far as we are concerned.

Objection 3: In *Physics* 1 the Philosopher says that, in our cognition, what is defined comes earlier than the parts of the definition. But the parts of a definition of what is less universal are more universal; e.g., *animal* is part of the definition of *man*. Therefore, universals are known later as far as we are concerned.

Objection 4: It is through effects that we arrive at causes and principles. But universals are a sort of principle. Therefore, universals are known later as far as we are concerned.

But contrary to this: *Physics* 1 says, "One must descend (*oportet devenire*) from universals to singulars."

I respond: In our intellect's cognition there are two things that have to be taken in account.

The first is that intellective cognition in some sense takes its origin from sentient cognition. And since the sensory power deals with singulars and the intellect with universals, it must be the case that, as far as we are concerned, the cognition of singulars is prior to the cognition of universals.

The second thing that has to be taken into account is that our intellect proceeds from potentiality to actuality. But everything that proceeds from potentiality to actuality first arrives at an incomplete actuality, which lies between the potentiality and the actuality, before arriving at perfect actuality. Now the perfect actuality at which the intellect arrives is *complete scientific knowledge (scientia completa)*, through which it has a distinct and determinate cognition of things. And the incomplete actuality with a sort of murkiness (*indistincte sub quadam confusione*); for what is known in this way is known in some respect in actuality and in some sense in potentiality. Hence, in *Physics* 1 the Philosopher says, "What is first manifest and certain to us are things that are somewhat indistinct (*confusa*), but later on, by drawing distinctions, we come to have distinct cognition of principles and elements." And it is clear that to have cognition of something that contains many things without having a proper knowledge of each of the things contained in it is for our cognition of it to be somewhat indistinct. And it is possible for us to have this sort of indistinct cognition both of a *universal whole*, which contains its parts in potentiality, and also of an *integral whole*, since it is possible for there to be an indistinct cognition of both kinds of whole in the absence of a distinct cognition of the parts.

Now to have a distinct cognition of what is contained in a *universal whole* is to have a cognition of something less general (*de re minus communi*) than it. For instance, to have an indistinct cognition of an animal is to have a cognition of the animal insofar as it is an animal, whereas to have a distinct cognition of an animal is to have a cognition of the animal insofar as it is a rational animal or a non-rational animal—e.g., to have a cognition of it as a man or a lion.

Thus, what happens is that our intellect has the cognition *animal* prior to having the cognition *man*, and the same line of reasoning holds whenever we are comparing something more universal to something less universal. And since the sensory power goes from potentiality to actuality in the same way that the intellect does, this same order of cognition is evident in the case of the sensory power as well. For in accord with the sensory power, we judge what is more general prior to what is less general, both with respect to place and with respect to time. For instance, with respect to place, when something is seen from afar, it is perceived to be a body before it is perceived to be an animal, and it is perceived to be an animal before it is perceived to be a man, and it is perceived to be a man before it is perceived to be Socrates or Plato. Again, with respect to time, at the beginning a young child distinguishes a man from a

non-man before distinguishing *this* man from *that* man; this is why, as *Physics* 1 points out, "At the beginning young children call all men 'father', whereas later on they mark each man as distinct (*determinant unumquemque*)."

The reason for this is clear. If someone knows something indistinctly, he is still in potentiality with respect to knowing a principle of division (*principium distinctionis*); for instance, someone who knows the genus is in potentiality with respect to knowing the specific differences. And so it is clear that indistinct cognition lies between potentiality and actuality.

Therefore, one should claim that, as far as we are concerned, the cognition of singulars is prior to the cognition of universals in the sense that sentient cognition is prior to intellective cognition. However, with respect to both the sensory power and the intellect, cognition that is more general (*communis*) is prior to cognition that is less general.

Reply to objection 1: A universal can be considered in two ways:

First, insofar as the universal nature is considered along with the intention of universality. Since the intention of universality, viz., one and the same thing's having a relation to many, arises from the intellect's act of abstracting (*proveniat ex abstractione intellectus*), the universal must be posterior when considered in this way. Hence, *De Anima* 1 says, "Either the universal *animal* is nothing or else it is posterior." By contrast, according to Plato, who posited subsistent universals, the universal, when considered in this first way, would be prior to the particular, which, on his view, exists only through participation in those subsistent universals that are called 'ideas'.

The second way in which a universal can be considered is with respect to the nature itself, e.g., *animal-ness* or *human-ness*, insofar as it is found in the particulars. When the universal is considered in this way, one should say that there are two orderings of nature:

The first is the *path of generation and time (via generationis et temporis)*, and on this path the things that are imperfect and in potentiality are prior. In this sense, what is more general is prior in nature. This is obvious in the generation of man and animal; for "the animal is generated prior to the man," as *De Generatione Animalium* puts it.

The second is the *ordering of perfection (ordo perfectionis)*, or the *ordering of nature's intention (ordo intentionis naturae)*, in the sense that actuality is absolutely speaking prior in nature to potentiality, and the perfect is absolutely speaking prior in nature to the imperfect. Given this ordering, the less general is prior in nature to the more general, e.g., man is prior in nature to *animal*. For nature's intention does not stop at the generation of the animal; instead, nature tends toward generating the man.

Reply to objection 2: The more general universal is related to the less general universal as both a whole and a part:

As a whole, in the sense that the more universal contains in potentiality not only the less universal but other things as well. For instance, it is not only *man*, but also *horse*, that is contained under *animal*.

As a part, in the sense that in its definition (*ratio*) the less general contains not only the more general, but other things as well. For instance, *man* contains not only *animal*, but also *rational*.

So, then, considered in itself, *animal* is prior in our cognition to *man*, but *man* is prior in our cognition to *animal*'s being a part of the definition of man.

Reply to objection 3: There are two ways in which to have a cognition of a part:

First, *absolutely speaking*, according to what the part is in its own right. And in this sense nothing prevents there being a cognition of the parts prior to the cognition of the whole—e.g., a cognition of the rocks prior to a cognition of the house.

Second, *insofar as they are parts of this whole*. And in this sense it is necessary for us to have a cognition of the whole before a cognition of the parts; for instance, we first have a cognition of the house by means of an indistinct cognition, before we distinguish each of its parts from the others.

So, then, one should reply that the parts of a definition (definientia), considered absolutely, are

known before that which is defined. Otherwise, what is defined would not be made known to us through those parts. On the other hand, *insofar as they are the parts of the definition*, they are known after what is defined; for instance, we know *man* in a sort of indistinct cognition before we know how to distinguish everything that belongs to the definition of *man*.

Reply to objection 4: Insofar as a universal is taken together with *the intention of universality*, it is in some sense a principle of cognition, since the intention of universality follows upon that mode of intellective understanding that occurs through abstraction. However, it is not the case that, as Plato thought, everything that is a principle of cognition has to be a principle of being; for sometimes we have cognition of a cause through its effect and of a substance through its accidents. Hence, according to Aristotle, the universal, taken in this way, is neither a principle of being nor a substance; this is clear from *Metaphysics* 7.

On the other hand, if we consider the nature of the genus and the nature of the species (*natura* generis et speciei) insofar as they exist in singulars, then the universal taken in this way has the character of a formal principle with respect to the singulars; for something is singular because of the matter, whereas the nature of the species (*ratio speciei*) is taken from the form. However, the nature of the genus is related to the nature of the species more in the manner of a material principle, since the nature of the genus (*natura generis*) is taken from what is material in the thing, whereas the nature of the species (*ratio speciei*) is taken from the notion (*ratio*) animal is taken from the sentient, whereas the notion man is taken from the intellective. And the reason why nature's ultimate intention is directed toward the species and not toward the individual or toward the genus is that the form is the end of generation, whereas the matter exists for the sake of the form.

However, it is not necessary for every cognition of a cause or principle to be posterior as far as we are concerned, since sometimes we come to a cognition of unknown effects through their sensible causes, and sometimes vice versa.

Article 4

Can we have an intellective understanding of many things at once?

It seems that we can have an intellective understanding of many things at once:

Objection 1: The intellect lies beyond time (*est supra tempus*). But *before (prior*) and *after* (*posterior*) have to do with time. Therefore, the intellect understands diverse things at once and not according to *before* and *after*.

Objection 2: Nothing prevents diverse forms that are not opposed to one another from actually existing in the same thing at the same time, in the way that a smell and a color exist in an apple. But intelligible species are not opposed to one another. Therefore, nothing prevents a single intellect from coming into act with respect to diverse intelligible species simultaneously, and in this way it can have an intellective understanding of many things at once.

Objection 3: The intellect has an intellective understanding of a whole, such as a man or a house, all at once. But many parts are contained in a whole. Therefore, the intellect can have an intellective understanding of many things at once.

Objection 4: As *De Anima* says, one cannot have a cognition of the difference between one thing and another without apprehending both of them at the same time; and the same line of reasoning holds for any comparison whatsoever. But our intellect has cognition of the differences between one thing and another, and of comparisons between one thing and another. Therefore, it has a cognition of many things

at once.

But contrary to this: *Topics* says, "Intellective understanding is of one thing only, but scientific knowledge is of many things."

I respond: The intellect can have an intellective understanding of many things in the manner of one thing (*per modum unius*), but not in the manner of many things (*per modum multorum*)—and by 'in the manner of one thing (or many things)' I mean through one (or many) intelligible species. For the mode of an action follows upon the form that is the principle of that action.

On the other hand, if certain things are such that the intellect can understand them under a single intelligible species, then it can understand them all at once. For the reason why God sees all things at once is that He sees all things through one thing, viz., His own essence.

However, if certain things are such that the intellect understands them through diverse intelligible species, then it does not understand them all at once. The reason for this is that it is impossible for a subject to be perfected all at once by several forms that belong to the same genus but different species; for instance, it is impossible for the same body to be simultaneously colored in the same respect by diverse colors, or for it to have diverse shapes. But all intelligible species belong to one genus, since they are perfections of a single intellective power, even though the things that they are the species of belong to diverse genera. Therefore, it is impossible for a single intellect to be perfected all at once by diverse intelligible species in such a way as to have an actual intellective understanding of diverse things.

Reply to objection 1: The intellect lies beyond the time that measures the motion of corporeal things. But the plurality of intelligible species causes an alternation of intelligible operations (*quandam vicissitudinem intelligibilium operationum*), in accord with which one operation occurs before another. In *Super Genesim ad Litteram* Augustine calls this 'time' when he says, "God moves the spiritual creature through time."

Reply to objection 2: It is not only forms which are opposites that cannot exist all at once in the same subject; neither can forms of the same genus, even if they are not opposites. This is clear from the example adduced above about colors and shapes.

Reply to objection 3: Parts can be thought of in two ways:

First, they can be thought of with a certain *indistinctness* insofar as they exist in the whole, in which case they are being thought of through the single form of the whole and so are being thought of all at once.

Second, they can be thought of by a *distinct* cognition insofar as each is thought of through its own intelligible species, in which case they cannot all be understood intellectively at once.

Reply to objection 4: When the intellect understands a distinction between two things or a comparison of the one to the other, it has a cognition of the two distinct things, or of the two things being compared, under the notion *comparison* or *distinction* itself—just as it was claimed above that the intellect has a cognition of the parts under the notion *whole*.

Article 5

Does our intellect engage in intellective understanding by composing and dividing?

It seems that our intellect does not engage in intellective understanding by composing and dividing (*non intelligat componendo et dividendo*):

Objection 1: Composition and division [of subject and predicate] always involve many items. But the intellect cannot have an intellective understanding of many things at once. Therefore, the intellect

cannot engage in intellective understanding by composing and dividing.

Objection 2: Either the present tense, the past tense, or the future tense (*tempus praesens, praeteritum vel futurum*) is adjoined to every composition and division. But the intellect abstracts from time, just as it abstracts from other particular conditions. Therefore, the intellect does not engage in intellective understanding by composing and dividing.

Objection 3: The intellect engages in intellective understanding by assimilating itself to the things (*per assimilationem ad res*). But there is no composition or division [of subject and predicate] among the things; for among the things there is nothing except what is signified by the predicate and by the subject—and this is one and the same thing if the composition is true. For a man is truly that which is an animal. Therefore, the intellect does not compose and divide.

But contrary to this: As the Philosopher says in *Perihermenias* 1, spoken words signify the intellect's conceptions (*conceptiones intellectus*). But in spoken language there is composition and division, as is clear in the case of affirmative and negative propositions (*in propositionibus affirmativis et negativis*). Therefore, the intellect composes and divides.

I respond: It is necessary for the human intellect to engage in intellective understanding by composing and dividing. For since the human intellect passes from potentiality into actuality, it has a certain likeness to generable things, which do not have their perfection immediately, but instead acquire it successively. In the same way, the human intellect does not immediately come to a perfect cognition of a thing in its first apprehension of it. Instead, it first apprehends an aspect of it (*aliquid de ipsa*), viz., the 'what-ness' (*quidditas*) of the thing itself, which is the first and proper object of the intellect; and then it comes to understand the properties, accidents, and relations associated with the thing's essence (*circumstantes rei essentiam*). Accordingly, it must necessarily (a) compose one apprehended thing with another or divide one apprehended thing from another and (b) proceed from one composition or division to another, i.e., reason discursively (*ratiocinari*).

By contrast, the angelic intellect and the divine intellect are incorruptible beings that have their total perfection immediately from the beginning. Hence, the angelic intellect and the divine intellect are immediately in perfect possession of a complete cognition of a thing. Thus, in having a cognition of a thing's 'what-ness', they have, with respect to that thing, an immediate cognition of whatever we ourselves can come to a cognition of by composing and dividing and reasoning discursively.

And so the human intellect engages in intellective cognition by composing and dividing, as well as by reasoning discursively. By contrast, the divine intellect and the angelic intellect do, to be sure, have a cognition of composition and division and discursive reasoning; however, they have this cognition not by themselves composing or dividing or reasoning discursively, but instead through an intellective understanding of their simple 'what-ness' (*quidditas*).

Reply to objection 1: The intellect's composing and dividing are effected through a sort of comparison or contrast. Hence, the sense in which the intellect, in composing and dividing, has a cognition of many things is the same sense in which it has a cognition of contrasts or comparisons between things.

Reply to objection 2: As was explained above (a. 1 and q. 84, a. 7), the intellect abstracts from phantasms, and yet it does not have actual intellective understanding except by turning itself back to the phantasms. And it is because the intellect turns itself back to the phantasms that tense is adjoined to the intellect's compositions and divisions.

Reply to objection 3: The likeness of a thing is received into the intellect according to the intellect's own mode and not according to the mode of the thing. Hence, even though there is something on the part of the thing that corresponds to the intellect's composition and division, it is not present in the thing in the same way that it is present in the intellect. For the proper object of the human intellect is the

'what-ness' (quidditas) of a material thing that falls under the sensory power and imagination.

Now there are two sorts of composition found in a material thing:

The first is the composition of *form* with respect to *matter*, and the intellect's composition corresponds to this sort of composition by a universal whole's being predicated of its part. For the genus is taken from the common matter, whereas the difference that completes the species is taken from the form, and the particular is taken from the material individual.

The second sort of composition is the composition of an *accident* with respect to its *subject*, and the intellect's composition corresponds to this sort of real composition by an accident's being predicated of its subject, as when one says, 'The man is white'.

On the other hand, the intellect's composition differs from the thing's composition by the fact that the items composed in the thing are diverse from one another, whereas the intellect's composition is a sign of the identity of the items that are composed. For the intellect does not compose in such a way as to affirm that the man is the whiteness (*homo est albedo*); rather, it composes in such a way as to affirm that the man is white, i.e., that the man is a thing that has the whiteness (*homo est albeds*, *id est habens albedinem*). For that which is the man is the same subject as that which has the whiteness.

Something similar holds for the composition of form and matter. For 'animal' signifies that which has a sentient nature, 'rational' signifies that which has an intellective nature, and 'man' signifies that which has both a sentient nature and an intellective nature. But Socrates has all these things along with a material individual. And it is according to this notion of identity that our intellect composes one thing with another by predicating.

Article 6

Is there falsity in the intellect?

It seems that there can be falsity in the intellect (*intellectus possit esse falsus*):

Objection 1: In *Metaphysics* 6 the Philosopher says, "The true and the false exist in the mind." But as was explained above (q. 79), the mind and the intellect are the same thing. Therefore, there is falsity in the intellect.

Objection 2: Opinion and discursive reasoning belong to the intellect. But falsity is found in both of them. Therefore, there can be falsity in the intellect.

Objection 3: Sin exists in the intellective part of the soul. But sin is accompanied by falsity, since, as Proverbs 14:22 says, "Those err who work evil." Therefore, falsity can exist in the intellect.

But contrary to this: In *83 Quaestiones* Augustine says, "Everyone who makes a mistake fails to understand intellectively that which he is mistaken about." And in *De Anima* the Philosopher says, "Intellective understanding is always correct (*intellectus semper est rectus*)."

I respond: In *De Anima* 3 the Philosopher compares the intellect to the sensory power on the point at issue here. For the sensory power is not deceived with respect to its proper object; for instance, the power of sight is not deceived about color, except perhaps incidentally (*per accidens*) because of an impediment involving the organ—as when a feverish man's sense of taste judges sweet things as bitter because his tongue is full of bad humors.

In the case of the common sensibles, however, the sensory power makes mistakes in judging about size or shape, as when it judges that the sun is the size of a human foot, even though it is larger than the earth. Moreover, the sensory power makes many more mistakes with respect to things that are sensible *per accidens*, as when it judges that vinegar is honey because of a similarity in their color. The reason

for this is clear. Each power is, as such, ordered *per se* toward its proper object, and things of this sort always behave in the same way. Hence, as long as the power remains, its judgment does not fail with respect to its proper object.

Now the proper object of the intellect is the 'what-ness' (*quidditas*) of a thing. Hence, with respect to the 'what-ness' of a thing the intellect does not make mistakes, speaking *per se*. But with respect to what accompanies a thing's essence or 'what-ness', the intellect can be mistaken when it relates one thing to another, either by composing or by dividing or by reasoning discursively.

For this reason, it is also the case that the intellect cannot err with respect to those propositions that it has an immediate cognition of once it has a cognition of the 'what-ness' of their terms. This occurs in the case of first principles, from which an infallibility of truth also arises, and in the case of conclusions in accord with the certitude of scientific knowledge. Still, it happens incidentally (*per accidens*) that the intellect is mistaken about what something is in the case of composite things. This is not because of any [bodily] organ, since the intellect is not a power that uses an organ; rather, it is because of compositions that intervene with respect to the definition in cases where either the definition of one thing is applied falsely to another thing, e.g., the definition of a circle is applied to a triangle, or when the definition is false in itself and implies an impossible composition, as would occur if, say, *rational animal with wings* were taken to be the definition of some entity.

Hence, in the case of simple things, where no composition can intervene in their definitions, we cannot be mistaken; rather, as *Metaphysics* 9 says, in such cases we are mistaken when we totally fail to grasp them (*deficitus in totaliter non attingendo*).

Reply to objection 1: The Philosopher is claiming that falsity exists in the mind with respect to composition and division.

Reply to objection 2: In this second objection, he is saying the same thing about opinion and discursive reasoning.

Reply to objection 3: As for the error of sinners, this consists in an application with respect to something desirable. However, the intellect is never deceived in its absolute consideration of the 'what-ness' of a thing and of those things that we have cognition of through the 'what-ness'. And this is what the passages [from Augustine and the Philosopher] that are adduced for the contrary position are talking about.

Article 7

Can someone understand one and the same thing better than someone else does?

It seems that it cannot be the case that someone understands one and the same thing better (*melius*) than someone else does:

Objection 1: In 83 *Quaestiones* Augustine says, "If anyone understands (*intelligit*) a thing to be otherwise than it is, then he does not understand (*intelligit*) it at all. Therefore, there is no doubt that there is a perfect understanding, unsurpassable in excellence. And so there are not infinitely many degrees of understanding a given thing; nor can one man understand it more (*plus*) than another."

Objection 2: When the intellect has intellective understanding, it has truth. But since truth is a sort of equality (*aequalitas quaedam*) between the intellect and the thing, it does not admit of more and less, since it is not proper to say that something is more equal or less equal. Therefore, neither is it proper to say that something is more understood or less understood intellectively.

Objection 3: The intellect is the most formal aspect of a man. But a difference in form causes a

difference in species. Therefore, if one man has greater understanding than another man (*si unus homo magis alio intelligit*), it seems that they do not belong to the same species.

But contrary to this: Our experience indicates that some understand more deeply (*profundius*) than others; for instance, someone who can trace a conclusion back to its first principles and first causes understands it more deeply than someone who is able to trace it back only to its proximate causes.

I respond: There are two ways to interpret what it means for someone to understand one and the same thing more (*magis*) than someone else does.

On the first interpretation, 'more' modifies the act of intellective understanding *on the part of the thing that is understood*. And on this interpretation, it is not possible for someone to understand the very same thing more than someone else, since if he understood it to be otherwise than it is—whether better than it is or worse—he would be mistaken and, as Augustine argues, would not understand it at all.

On the second interpretation, 'more' determines the act of intellective understanding *on the part of the one who is engaged in understanding*. And on this interpretation, someone can understand the same thing better than someone else, in virtue of having more power of understanding—in the same way that someone who has a more perfect power and in whom the visual power is more perfect sees a given thing better by a corporeal act of seeing than someone else does.

There are two ways in which this occurs in the case of the intellect:

One way is on the part of the intellect itself, when it is more perfect. For it is clear that to the extent that the body is better disposed, the soul is better. This is manifestly obvious in the case of beings that are diverse in species. The reason is that actuality and form are received into matter in accord with the matter's capacity. Hence, since even among men there are those who have a body that is better disposed, they receive a soul that has a greater power of intellective understanding. Hence, *De Anima* 2 says, "We notice that those with soft flesh are more mentally gifted."

The second way is on the part of the lower powers that the intellect needs for its own operation. For those in whom the power of imagining and the cogitative power and the power of remembering are better disposed are better disposed for intellective understanding.

Reply to objection 1: The reply to the first objection is obvious from what has been said.

Reply to objection 2: The same holds for the second objection. For the truth of the intellect consists in the thing's being understood intellectively as it is.

Reply to objection 3: A difference of form that arises only from the different dispositions of the matter makes for a diversity only in number and not in species. For diverse individuals have diverse forms that are diversified according to the matter.

Article 8

Does our intellect have cognition of what is indivisible prior to what is divisible?

It seems that our intellect has cognition of what is indivisible prior to what is divisible:

Objection 1: In *Physics* 1 the Philosopher says, "We have intellective understanding and scientific knowledge on the basis of our cognition of principles and elements." But indivisibles are the principles and elements of what is divisible. Therefore, indivisibles are known to us prior to what is divisible.

Objection 2: That which is posited in a thing's definition is such that we have a prior cognition of it, since, as *Topics* 6 says, a definition comes "from what is prior and more known." But indivisibles are posited in the definition of what is divisible; for instance, as Euclid says, "A line is a length without breadth whose extremities are two points." And oneness is posited in the definition of number, since, as

Metaphysics 10 says, "Number is a multitude measured by *one*." Therefore, our intellect understands the indivisible prior to the divisible.

Objection 3: Cognition is by means of what is similar. But what is indivisible is more similar to the intellect than what is divisible, since, as *De Anima* 3 says, "The intellect is something simple." Therefore, our intellect first has a cognition of what is indivisible.

But contrary to this: *De Anima* 3 says, "What is indivisible is shown to be a privation." But a privation is known later. Therefore, what is indivisible is known later as well.

I respond: As is clear from what has gone before (a. 1 and q. 84, a. 7), in the state of the present life the object of our intellect is the 'what-ness' of a material thing, which the intellect abstracts from the phantasm. And since a cognitive power's proper object is that which it has cognition of in the first place and *per se*, the order in which we have intellective understanding of the indivisible can be thought about in terms of the indivisible's relation to a 'what-ness' of the sort in question.

Now as De Anima 3 says, 'indivisible' is used in three senses:

In one sense, a continuum is indivisible by virtue of the fact that it is actually undivided, even though it is divisible in potentiality. The indivisible in this sense is understood by us prior to its division into parts, since, as was explained above (a. 3), an indistinct cognition is prior to a distinct cognition.

In a second sense, something is indivisible by its species, in the way that a man's reason is something indivisible. And in this sense, too, the indivisible is understood prior to its division into the parts of reason, as was explained above (a. 3), and likewise prior to the intellect's composing and dividing by affirming or negating.

The reason for this is that the intellect in its own right understands indivisibles of these two sorts as its proper object.

In a third sense, what is indivisible is altogether indivisible—e.g., a point (*punctus*) and oneness (*unitas*), which are divided neither in actuality nor in potentiality. And the indivisible in this sense is understood in a posterior way through the privation of divisibility (*per privationem divisibilis*). Hence, a point is defined by a privation (*privative*): A point is that which has no parts. Similarly, the definition of *one* is that which is not divisible, as *Metaphysics* 10 says. The reason is that an indivisible in this sense has a certain sort of opposition to a corporeal thing, whose 'what-ness' is what the intellect grasps in the first place and *per se*.

However, if, as the Platonists claimed, our intellect had intellective understanding by participating in separated indivisibles, then it would follow that what is indivisible in this third sense would be understood first. For according to the Platonists, things participate first in what is prior.

Reply to objection 1: In the acquisition of scientific knowledge, it is not always the principles and elements that are prior, since sometimes we go from sensible effects to a cognition of intelligible principles and causes.

On the other hand, in fully completed scientific knowledge (*in complemento scientiae*), the knowledge of the effects always depends on the cognition of principles and elements. For as the Philosopher says in the same place, "We are thought to have scientific knowledge when we are able to resolve what is derived from the principles into its causes."

Reply to objection 2: 'Point' does not occur in the commonly accepted definition of a line, since it is obvious that in an infinite line, or even in a circular line, there are no points except in potentiality. However, Euclid is here defining a finite straight line, and so he posits 'point' in the definition of a line in the way that a terminus occurs in the definition of what it terminates.

Oneness (*unitas*), on the other hand, is the measure of number and so occurs in the definition of a number that is measured. It does not, however, have a place in the definition of the divisible; instead, just the opposite occurs.

Reply to objection 3: The likeness through which we have intellective understanding is the species of what we have cognition of that exists in the one who understands. And so it is not because of the likeness of a nature to the cognitive power that something is understood first; rather it is because of the cognitive power's agreement with the object. Otherwise, the power of seeing would have cognition of the sense of hearing rather than of color.