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Intellectual Knowledge of Material Particulars in Thomas Aquinas: An Introduction

James B. South

It is well known that St. Thomas Aquinas holds that the primary objects of the human intellect are the essences of material objects. It is also well known that Thomas also provides an account of how the human intellect can know material singulars. This is an important problem for Thomas insofar as basic metaphysical, psychological, and cognitional issues come into play. Moreover, Thomas is explicit that the knowledge of material singulars is necessary, particularly in practical contexts. Most discussions of the knowledge of material singulars frequently revolve around the content of such knowledge. What is it that is known when the intellect knows such singulars? In addition, while there is general agreement that the unity of the human person makes intellectual knowledge of material singulars possible, there is little discussion of how this unity is possible. Accordingly, as a prolegomena to understanding Thomas's full account of our knowledge of the singular, in this paper I shall discuss the general outline of the mechanics by which the human intellect knows material singulars. The major focus of the essay will consist in an explication of the metaphysical basis for Thomas's position. Given the radically different ontological status of the objects of sense and the objects of intellect, how is it that the intellect can know material singulars that are primarily and directly objects of sense cognition.¹

Thomas's views on the human composite are well known. It has been demonstrated that Thomas believes that the self-subsistent intellect is able to account for the unity of the human person insofar as it is the principle through which *esse* is bestowed on the entire human person, both body and soul.² However, in this paper I want to consider the problem from a slightly different angle. I shall focus on Thomas's psychology of cognition. In particular, I want to

concentrate on a problem that arises from Thomas's commitment to a form of dualism. This dualism is best seen in his account of the relationship between the operations of sense and intellect. As we shall see, Thomas is insistent on three points. The first point is that the sensory powers are organic. Coupled with that claim is the emphasis Thomas places on the non-organic nature of the intellect. Finally, Thomas holds that there is a close relationship between the organic sense powers and the non-organic intellect insofar as the origin of all our cognition is from sense cognition. I want to show how Thomas is able to consistently hold these three positions. In the first part of this paper, I shall briefly sketch Thomas's account of the respective operations of sense and intellect paying particular attention to how they interact. Following that, I shall consider the issue in which the problems associated with Thomas's view become most readily apparent. This issue is the account Thomas gives of the intellectual knowledge of material singulars. I shall conclude by explaining the principle by which Thomas is able to account for the respective causal relationships between intellect and sense in the case of the knowledge of the singular.

I

The mediating role of sensation is central to Thomas's account of cognition. Thomas recognizes that there are both material objects in the external world and an immaterial intellect that must come to some knowledge through the causal efficacy of the external objects. The first step to intellectual knowledge, therefore, is sensory cognition. Despite their differences, the need for some form (*forma*) is a common condition of both sense and intellect. This is due to the fact that all cognition arises through the mediation of form.³ In the case of sense cognition, this form is an image (*imago*) of the sensible object. The matter of the material object is not itself present in the sense power. The likeness in the sense power is adequate for sensory

cognition but not for intellectual cognition. Therefore the intellect itself must make the potentially intelligible forms existing in the sense power actually intelligible.⁴

In sense cognition, the sense power, which is nothing more than an "informed" sense organ, is immuted by an external sensible object. In a properly functioning sense power, the proper sensible is then immediately sensed.⁵ For example, when we see a tree, it is due to the causal influence of the tree as a sensible object as well as the properly functioning sense organ. It must be noted that it is not the tree that we see immediately; we see simply the visible accidents of the tree. It is due to the work of the internal senses, particularly the imagination, the cogitative power, and sense memory, that we are able to produce within ourselves a likeness (*similitudo*) of the tree. It is this likeness of a particular thing, which Thomas calls a "phantasm," that is the basis for the operation of the intellect from which we obtain our knowledge of the essence of a tree.⁶

Thomas marks this distinction between the sensing of proper sensibles and the sensing of material objects by a difference in terminology. When a particular sense is confronted by a proper sensible, the confrontation is effected by what Thomas calls a "sensible *species*." Sensation is nothing other than the reception of such a sensible *species* from the object in a properly functioning sense organ. Thus, for example, when the eye is confronted by a tree, the sensible *species* of green "immutes" the eye in such a way that the eye sees green. When, however, an internal sense power coordinates all the proper sensible *species* into a likeness of a tree, Thomas calls the result a "phantasm."⁷

It is necessary to say a little bit more about the phantasm and its role. The importance of the phantasm cannot be stressed too much. It is from the phantasm and not from the external senses that the intellect initially receives its material.⁸ The relevant internal senses are, of course, each organic in nature, i.e., each is present in some organ of the body.⁹ Accordingly, the phantasm itself is in some way

material. This materiality of the phantasm explains why Thomas states that it is only potentially intelligible. In the operation of the intellect, the intellect prescind from any consideration of individual principles and considers the material object "in general". When the intellect thinks the concept "tree" it can consider any tree, not just the particular tree that is represented by a phantasm. This ability to think by means of universal concepts arises from the fact that the intellect alone, as a cognitive power of the human soul, is independent of any bodily organ.¹⁰

Despite Thomas's insistence on the non-organic nature of the intellect, he nevertheless is committed to the view that the intellect can never think without "conversion" to phantasms present in the internal senses.¹¹ Such a position follows readily enough if it is indeed the case that the human being is a unified knower. To better understand the necessity of the phantasm, it will help to consider briefly Thomas's contrast between two different intellectual powers. These two powers are, of course, the agent intellect and the potential intellect. It is the potential intellect that thinks by forming universal concepts such as "tree." It is also the potential intellect that is responsible for all higher level discursive reasoning processes. These include both the formation of propositions and judgements as well as those processes that require some combination of sentences, e.g. a syllogism.¹² The agent intellect is responsible for making the potentially intelligible phantasm actually intelligible. The agent intellect itself does not possess any knowledge of its own. Its primary task is the creation of an intelligible *species* that becomes the means by which the potential intellect forms a concept. This intelligible *species* is a universal representation of the information that is present to the agent intellect in the particular phantasm.¹³

Thomas typically describes two functions of the agent intellect. He states that the agent intellect illuminates the phantasm and abstracts the intelligible *species*.¹⁴ Both of these functions must be carefully understood. The illumination of the phantasm results in the

phantasm becoming "adaptable" (*habilia*) so that abstraction can take place.¹⁵ The use of the term illumination is explicable within the context of the "natural light" (*lumen naturale*) of the agent intellect. This light is to be understood as a participation in the light that God possesses. Thomas contrasts such light with both the light of faith (*lumen fidei*) and the light of prophecy (*lumen prophetiae*). Unlike these latter two types of light that can allow a person to know things that are not naturally knowable, the light of the agent intellect is a natural light (*lumen naturale*).¹⁶ Presumably, then, Thomas is simply pointing out that the agent intellect is required in order for humans to have any knowledge of those things that are the proper objects of human knowledge, namely, the essences of material things.¹⁷ Thomas offers an important analogy to further underscore his position. He compares the illumination of the agent intellect to the greater power acquired by the sensitive power in virtue of its conjunction (*coniunctio*) with the intellectual power.¹⁸ I will return to the full significance of this comparison later. Right now, what is important is to notice that Thomas takes this illumination by the agent intellect to be due to the general relationship between the sense power and the intellect.

The obviously metaphorical connotation of "light" in the context of a discussion of intellectual cognition directs us to the basic understanding of Thomas's position. The root of the metaphor consists in the comparison of sight to intellectual knowledge. Thomas states that there are three things required for an act of vision: the object seen, the visual power that is the subject of seeing, and light to make the act of vision possible. In a comparable manner, there are three things required for intellectual knowledge: the phantasm as the bearer of information about the external world, the potential intellect as the knowing power, and the agent intellect as what mediates between the two other requirements. Accordingly, the illumination of the phantasm is at bottom the act that makes the unintelligible phantasm actually intelligible.¹⁹

The second role of the agent intellect follows (logically, if not temporally) from the illumination, i.e. preparation, of the phantasm. The agent intellect "abstracts" (*abstrahere*) the intelligible *species* from the illuminated phantasm. This abstraction of the the intelligible *species* is what allows the potential intellect to consider the natures (*naturae*) of material things.²¹ What this means in practice is that the intellect is able to think about material objects in terms of their essential principles and not as they are represented by the phantasm. The intellect can do this because the intelligible *species* does not reproduce the individual conditions that are present in the phantasm. Once abstraction occurs, the abstracted intelligible *species* informs (*informare*) the potential intellect.²¹ This intelligible *species* is a likeness (*similitudo*) of the thing actually understood, i. e., the essence of a material object. Thomas is quick to point out that the intelligible *species* is representative of the same thing that the phantasm represents. However, the intelligible *species* represents only what pertains to the nature of the material object.²² In this way, then, Thomas keeps open the channel of causality from the external object.

The problem that arises from Thomas's discussion of the phantasm, agent intellect, and intelligible *species* concerns the precise mapping of the relationship between the organic phantasm and the purely immaterial intellect. More precisely the nature of the causal interaction between the immaterial agent intellect and the phantasm existing in the organic internal sense power remains to be explained. Thomas's primary attempt to explain this causal relationship consists in his claim that the agent intellect and the phantasm are related as principle and instrumental cause.²³ An example of a principle/instrumental causal relationship would be a person using a spoon to eat soup. The spoon is merely an instrument by which the person, the principle cause, eats soup. Similarly, Thomas suggests, since the phantasm is itself only potentially intelligible, it cannot be itself a sufficient cause for intellectual knowledge. It is simply a tool by which the agent intellect makes an intelligible *species*. The

phantasm is, however, a necessary cause insofar as it provides the basis, or matter (*materia*), from which the universal intelligible *species* is abstracted.²⁴ These two explanations do not give us much information as they stand. A fuller explanation will have to wait until it has been explained how Thomas accounts for the unity of the human and consequently how there can be one operation using two distinct powers. What is clear at this point is that Thomas is committed to the view that the agent intellect somehow uses the phantasm in order for it to produce an intelligible *species* that can in turn be the principle from which intellectual cognition can originate.

Of course, the generation of the intelligible *species* does not exhaust the activity of the intellect. The potential intellect, when informed by this intelligible *species*, itself generates what Thomas calls a concept (*conceptus*) or word (*verbum*) as the term of its act. It is important to note the difference between the intelligible species and the concept or mental word. The intelligible species is the principle, or beginning of intellectual knowledge, while the concept is the terminus of intellectual knowledge. Action occurs through some form and the intelligible species is the form through which human intellectual knowledge is possible. The mental word is the result of this action of human knowledge. It is constituted through the act that the intelligible species begins.²⁵ In the act of understanding, the intellect forms within itself an intention of the object understood. This intention is like the object, and it follows that, in forming this intention, the intellect understands the object itself.²⁶ This intention is the effect of the act of knowledge.²⁷

Although this intention is the result of the act of knowledge, it is not what we know, except secondarily; we know the nature of the object. However, the intention can be known by a reflexive act of the intellect in which the intellect knows the concept as an object.²⁸ In this way only is it possible to say that the intention is the object known.

The representative nature of the concept formed by the possible

intellect must be carefully understood. An object is known insofar as it is represented to the intellect and not insofar as it exists in the intellect. The intention, as a likeness existing in the knower, is not a principle by which the intellect knows the object as it is existing in the intellect. Rather it is a principle of knowing insofar as it has a relationship to the object known. An object is known, then, through the mode by which the likeness existing in the intellect is representative of the object.²⁹ Thus the intention is ordered to the object as an end. The intellect only forms an intention of the object within itself so that it might know the object.

This intention is also referred to by Thomas as the formation of a definition, or of a process of division or composition. These are expressed by language. A term signifies a definition, while a proposition signifies a division or composition on the part of the intellect. Accordingly words do not signify the intelligible species, but rather the intention which is the result of the activity of the possible intellect.³⁰

After providing this brief summary of the respective roles of sense and intellect in the cognitive process, it is possible to see the problem facing Thomas in stark outline. There can be no doubt that Thomas wants to claim both that the phantasm exerts some causal influence on the agent intellect and also that the agent intellect is the primary catalyst in the production of the intelligible *species*. The crucial question left involves specifying the precise mechanism that can account for the cooperation between the organic sense powers and the non-organic intellect. There are two problems here. First, how can something material act on something immaterial? Second, how can something immaterial act on something material? I believe that the best way to begin to answer these questions can be found in Thomas's discussion of a rather neglected issue, namely how the intellect is able to know material singulars. After a consideration of the major texts in which Thomas discusses this issue, it will be possible to see what it is that allows for the precise relationship

between sense and intellect.³¹

II

The earliest substantive text on the problem of intellectual knowledge of material singulars is found in the *Commentary on the Sentences*.³² Thomas stakes out familiar territory. He states that all cognition is through the action of forms. Forms, of themselves, are universal and through them the intellect is not able to reach to a knowledge of sensible singulars. Since the proper objects of the intellect as it is united with a body are these forms, it follows that the intellect directly knows these universal immaterial forms. In contrast, the singular is known through the senses. Indirectly, however, and by a kind of reflection (*reflexio*), the intellect can know the singular. It reaches this indirect knowledge from its knowledge of its proper object by returning to its act. From this act it can return to the intelligible *species* by which the proper object is known. In turn, from the *species* it can consider the phantasm from which the *species* itself was abstracted and through the phantasm it can know the singular.³³ What Thomas has done here, of course, is simply retrace the steps by which the intellect comes to know. By this retracing the intellect knows the singular object that was the causal basis for the proper knowledge in the first place.

This programmatic text is admittedly sketchy but clear enough given what we now know concerning sensation, the phantasm, the agent intellect and the intelligible species through which the intellect knows. What Thomas is claiming is that there is a direct causal connection between the object perceived and the intellectual knowledge we acquire from it. While the sense powers, because they are corporeal, cannot have intellectual knowledge of the singular, the intellect can have intellectual knowledge of the objects of sense insofar as it knows the source of its proper knowledge. It reaches this knowledge by a kind of reflection (*reflexio*) by which it goes back

(*redit*) to its sources. Issues that must still be clarified include the precise nature of the retracing involved and, more particularly, the meaning of *reflexio*. It must be noted that in this text Thomas does not give us any indication of how such an act is possible.

Several times in the *Disputed Questions on Truth* Thomas gives us more information concerning the intellectual knowledge of material singulars. Here his frequent way of stating the knowledge of the singular that we possess is to say that we have such knowledge *per accidens*. Again this is because the intellect knows directly only the universal natures of material objects. The intellect can, however, *per accidens* mix with singulars inasmuch as it is continuous with (*continuat*) the sensitive powers. This continuation (*continuatio*) works in two ways. In one way inasmuch as the sensitive powers terminate toward the intellect. This is understood along the lines of what occurs in the motion which is from things towards the soul. In this way, the intellect knows the singular through a certain reflection just as the mind, by knowing its object, returns (*redit*) in knowledge to its act, and then returns to the intelligible *species* that is the principle of its act, and finally returns to the phantasm from which the intelligible species had been abstracted. In this way, the intellect receives some knowledge of the singular.¹⁴

In a second way, there is a motion from the soul to external bodies. Such a motion begins from the mind and proceeds to the sensitive part, just as the mind rules (*regit*) the inferior powers. In this way, mind mixes with singulars through the medium of the cogitative power, which is also called the particular reason and has a particular organ in the body, namely the middle of the brain.¹⁵ This fact helps to explain the second mode of *per accidens* intellectual knowledge of the singular. This mixing of the intellect with the cogitative power gives the first speculative knowledge which is had of the singular, although it is speculative only *per accidens* since it is the cogitative power that performs the actual cognitive operation. It is important to note as well the stress that Thomas places on the fact

of the organic nature of the cogitative power. He is insistent on the strict demarcation between intellect and sense insofar as they are non-organic and organic respectively.

The next text to be considered is also from the *Disputed Questions on Truth*. Again, Thomas states that our intellect knows the singular only *per accidens*. He has recourse to Aristotle³⁶ and argues that the phantasm is related to the intellect as sensible objects (*sensibilia*) are to sense and he gives as an example colors which are outside the soul and yet are related to sight (*visus*). The analogy consists in comparing the abstraction that must take place for the sensible species to exist in the soul with the abstraction of the intelligible species from the phantasm. The term "abstraction" which Thomas here uses is not, as we have seen, his usual way of talking about sense cognition. However it is useful for the analogy insofar as Thomas wants to claim that just as sense cognition is continuous with (*continuatur*) the sense object, so too the intelligible species is continuous with the phantasm.³⁷

Thomas immediately qualifies his analogy. In sense cognition the species or likeness which is abstracted from the thing external to the soul is related directly to the sensible thing as its object. However, the intelligible *species* or likeness in the intellect does not bear this same relation to the phantasm. The phantasm is not what is known but is rather a medium of knowledge. Here Thomas has recourse to another analogy. In this case he considers a sense object reflected in a mirror. The sense is directed to the likeness in the mirror not as to an external thing, but rather to a likeness of an external thing.³⁸ From this analogy, Thomas draws the conclusion that the intellect does not know the phantasm directly as an object but by a reflection on the phantasm it returns (*redit*) to a knowledge of the phantasm. It arrives at this knowledge by considering the nature of its act and the nature of that from which it abstracted the intelligible species, namely, the phantasm. Again the mirror analogy plays a role. In sight, the sense is brought directly to a knowledge of the thing reflected through a

likeness received from a mirror. But this is only possible by a sort of reversion (*reversionem*) through the object to the image itself in the mirror.

From these considerations, then, Thomas draws the conclusion that the intellect has some knowledge of the particular according to a continuation (*continuatio*) of the intellect to the imagination insofar as it can reflect on the phantasm, a likeness of the singular, from which the intelligible species is abstracted.³⁹ The important new element in both this passage and the preceding passage from the *Disputed Questions on Truth* concerns the use of the words *continuat* and *continuatio*.⁴⁰ Like the passage from the *Commentary on the Sentences*, in these passages Thomas affirms that the intellect does not know the singular directly but only indirectly, or *per accidens*, through a reflection on its own act. This reflexive knowledge by which the intellect comes to some knowledge of the singular is now explained as being possible through the *continuatio* of the intellect with the interior senses and the *continuatio* of the external senses with the sensible objects.

It is clear that the reflexive knowledge is simply the ability of the intellect to retrace its own cognitive processes. But as Bérubé forcefully points out there is no implication here of a temporal priority of direct to indirect knowledge. Rather these are two terms to the same cognitive act. The direct act terminates in the universal while the indirect act terminates in the singular.⁴¹ The two types of knowledge are achieved by the same universal intelligible species. Thomas must explain how this reflexive knowledge is possible? How does the immaterial intellect know a material singular by means of a universal intelligible species derived from an intentionally existing phantasm in a material organ? Echoing Aristotle, Thomas states that properly speaking it is not the sense or the intellect which knows, but the human knows through both powers. The unity of the individual knower is at stake here.⁴² From the two texts we have just seen from the *Disputed Questions on Truth*, it is clear that Thomas has advanced

from his discussion in the *Commentary on the Sentences*. He is now using the terms "*continuatio*" and "*continuatur*" to explain how this indirect knowledge is possible. But it is not yet clear what the force of these terms is. More importantly, it is still not clear how he will account for the unity of the knower.

In the *Disputed Questions on the Soul*, Thomas reiterates what he has said previously. The intellect knows the material singular because it is conjoined (*conjuncta*) to the body. It does not, however, know the singular directly, but rather by a reflection. Thomas emphasizes that this is possible by the reversion (*revertitur*) of the intellect to a consideration of its own act. However, Thomas also emphasizes that the cogitative power and the imagination are necessary for this consideration to take place since it is the phantasm that the intellect reaches in knowing the singular. In addition he points out again the conjunction (*adiunctio*) of the intellect with these sense powers.⁴³

The *Summa Theologiae* shows no changes from the basic positions we have seen. Our intellect is not able to know the material singular directly but only indirectly by a kind of reflection. However, Thomas now explicitly situates this ability of the intellect within the context of the general necessity of all intellectual knowledge to turn to the phantasm as a condition of its occurrence. This is even clearer evidence that the process of reflection is not a self-conscious activity consequent in time upon knowledge of the universal but is instead a natural ability of the intellect in its ordinary activity.⁴⁴

The last major text of Thomas concerning the problem at hand occurs in the *Commentary on the "De anima"*. In commenting on Aristotle, Thomas distinguishes between the sense cognition of flesh and the intellectual cognition of the quiddity of flesh. It is also possible for the intellect to know both the flesh and the essence of flesh. It knows the quiddity by directly extending itself to the object, while it knows the singular by a reflection insofar as it returns to the phantasm from which the intelligible species is abstracted. This is yet further evidence that the reflection involved in the intellectual

knowledge of the singular is not a self-conscious one.⁴⁵

Having gone through these texts of Thomas we are able to make out his general view of the intellectual knowledge of material singulars. First, and most importantly, there is an intellectual knowledge of the singular. However this knowledge is strikingly different from the proper knowledge of the intellect. It is indirect or accidental, while the knowledge of quiddity is direct and *per se*. It is possible because the intellect and the sense powers are in "contact" and insofar as the intellectual power "is continuous with" the sense power. Finally it takes place through a reflection (*reflexio*).⁴⁶ This latter point is to be understood primarily as a spontaneous, or non-self-conscious act of the intellect although it can also be used when talking on a second order level about the process that occurs.

III

At this point, another frequently overlooked text in the *Disputed Questions on Truth* is of great help. In this text Thomas states that the cogitative power is the highest of the sensitive powers. In some way, then, the sense power comes in contact (*atingit*) with the lowest type of reason so that it can be said to participate in this lowest type of reason. Thomas continues in this passage to explain how the contact between the cogitative power and the intellect arises. According to Thomas, this "contact" is in accord with the rule of Dionysius which states that the beginning of the second is in contact with (*coniunguntur*) the end of the first.⁴⁷ I believe that this rather cryptic passage is the key to understanding Thomas's account of the mechanism by which intellectual knowledge of material singulars is possible. Moreover, I believe that this passage points the way to an understanding of the relationship between the sense powers and the intellect. We saw above that Thomas uses the notion of participation in the context of the relation between sense and intellect. In conjunction with the present passage, this consideration underscores

the importance of the metaphysical foundation that Thomas provides to describe the relationship between sense and intellect.

What I want to claim is that the principle invoked here by Thomas, which he calls "the rule of Dionysius", is the principle that makes intellectual knowledge of material singulars possible. In addition, this rule is used by Thomas to explain the general relationship between sense and intellect. This is because the principle accounts for the unity of the human person. It is precisely this unity that, as we have seen, is necessary for knowledge.⁴⁸ In short, it explains how the intellectual and sense powers are able to work together.

In order to see the importance of this principle for Thomas, it is sufficient to point out that this principle is invoked to explain how the immaterial soul can be the form of a material body. According to Thomas, the human soul is the most perfect of forms. As we have seen, the human soul contains an activity which is in no way dependent on the body, namely intellectual cognition. Now, because the actual being of any object is proportioned to its activity, it follows that the actual being of the human soul surpasses corporeal matter and is not totally contained in it but is touched by it. Inasmuch as the soul is touched by matter and its being (*esse*) is communicated to matter, it is the form of that matter. But it is only touched by matter because of the principle of Dionysius that the highest of the lowest is always touched by the lowest of the highest and therefore the human soul can communicate its being to the highest type of body, and from this communication a unity (*unum*) results composed of matter and form.⁴⁹ Now, if this principle of Dionysius is capable of explaining the unity of the human person, then it can also explain the unity of the human cognitional powers, i. e., the relation between sense and intellect. In fact we have seen Thomas use it to account for the relation between the cogitative power and the intellect. Before showing how this principle explains both the knowledge of the material singular as well as the general relationship between intellect and sense, however, it is

necessary to understand somewhat better this principle itself.

The principle under consideration has been called the "axiom of continuity."⁵⁰ This axiom is what makes possible the hierarchical worldview that Thomas, following Dionysius, puts forward. In the immediate context of the axiom, Dionysius is arguing that we learn about Divine Wisdom from all things. This Wisdom is the cause of the order of all things and is always linking the ends (*tele*) of the prior with the beginnings (*archai*) of the latter. Accordingly the order we see in things manifests the Divine Wisdom. Without going into the details of the Dionysian perspective, it is sufficient to note that this continuity holds together the Dionysian universe.⁵¹

The influence of Dionysius on the thought of Thomas is pervasive.⁵² Within the context of this essay, the immediate influence is the role that the axiom of continuity plays. In the Latin text of Dionysius which Thomas had, the axiom was translated as "*semper fines priorum coniungens principiis secundorum*."⁵³ Already in the terminology of "*coniungens*" we can see the influence on Thomas. As we saw above, Thomas's accounts of the intellectual knowledge of material singulars frequently makes use of terminology that involves "contact" between the sense and intellectual powers.⁵⁴

It should now be apparent that the "axiom of continuity" is the background for understanding Thomas's theory on the intellectual knowledge of the material singular. While previous commentators have been correct to notice the emphasis on the unity of the human knower, they have not always paid sufficient attention to the reason why this unity exists. It exists because of the basic continuity which the Divine Wisdom of God has ordained in a hierarchical universe. The immaterial intellect is continuous with the sensitive soul which in turn is continuous with the external physical world. It is this continuity that can account both for the general relationship between sense and intellect as well as the more specific issue of the intellectual knowledge of the material singular.

The general relationship between sense powers and intellectual

powers is best exemplified by the joint causality exercised by the agent intellect and phantasm in the production of the intelligible *species*. It is the hierarchy of powers, in which the lower power is in continuity with the higher power through participation that accounts for this relationship. Thomas, as we have seen, called the agent intellect the principle cause and the phantasm the instrumental cause. Such a relationship can have a unity even though there are two different components. The diner and his spoon are two different things, yet his activity of digging is one thing.⁵⁵

Consequently, when Thomas argues that the intellectual power is continuous with the sense powers and that this is the basis for the knowledge of the material singular, we are now in a position to see what he means. While the intellect directly knows the quiddity of the material object, indirectly it knows the particular insofar as it is continuous with the sensitive powers in which the material singular is represented in all its particularity. The *reflexio* that the intellect accomplishes to understand the singular is simply a way of glossing the activity made possible by this continuity.⁵⁶

IV

In this paper, I have tried to show that the foundation for understanding how intellectual knowledge of the material singular is possible presupposes an account of how intellectual knowledge in general is possible. This account relies on the relationship between an immaterial intellect and an organic internal sense. Thomas invokes a general neoplatonic metaphysical principle to explain the continuity between the highest organic cognitive power and the lowest immaterial cognitive power. It is because of the participation of the former in the latter that the human cognitive powers can achieve a unity in operation.

The basis for this general account of knowledge also explains the more particular case of the intellectual knowledge of material

singulars. The continuity between the phantasm and the intelligible *species* produced by the agent intellect allows the potential intellect to "reflect" back on the phantasm. This reflection provides us with our knowledge of the singular. It is the phantasm, the product of internal sensory processes, that provides the likeness of the material object. This phantasm, in turn, provides the causal connection between the material object and the intellect. This connection allows the intellect to make judgments about and have knowledge of material singulars.

Notes

1.D. Black, "The Influence of the *De divinis nominibus* on the Epistemology of St. Thomas Aquinas," *Proceedings of the Patristic, Medieval, and Renaissance Conference* 10 (1985), 43, has correctly stressed this ontological difference in the objects of sense and intellect.

2.For a good recent discussion of Thomas's account of the unity of the human person, see A. Maurer, "Descartes and Aquinas on the Unity of a Human Being: Revisited," *American Catholic Philosophical Quarterly* 57 (1993), 497-511. Older, but still valuable discussions can be found in G. Klubertanz, "The Unity of Human Activity," *The Modern Schoolman* 27 (1949), 75-103; A. Pegis *St. Thomas and the Problem of the Soul in the Thirteenth Century* (Toronto: Pontifical Institute of Mediaeval Studies, 1976 reprint of 1934 edition). Maurer neatly summarizes the standard position in the following manner: "The human person, according to Aquinas, contains a dualism of body (matter) and soul (form): two incomplete components of the person's essence, unified by the person's one complete *esse*, which belongs *per se* to the soul but is communicated to the body, so that there is but one *esse* of the whole composite."

3.*De ver* q. 10, a. 4.

4.*De ver* q. 8, a. 9.

5.Thomas discusses sense cognition in a variety of works. There is an important summary passage in the *Quaestiones De anima*, q. 13. For an excellent account of Thomas's theory of sense cognition, see G. Van Riet, "La théorie thomiste de la sensation externe," *Revue philosophique de Louvain* 51 (1952), 374-408. Van Riet stresses the essentially "physical" nature of sensation. On this account, an informed organ senses by being physically impressed by a *species* of a sensible object. The analogy favored by Thomas involves the impression of a seal on wax. The wax takes likeness of the seal as a form, but none of the matter of the seal is transferred to the wax. It is the sensible *species* that "transmits" this form from the sensible object to the sense organ.

6. Thomas refers to the phantasm as the likeness of a particular thing (*similitudo rei particularis*) at several places in his writings, e.g., *Summa theologiae* I, q. 84, a. 7, ad 2. This text, as well as other pertinent texts, is cited by E. P. Mahoney in his valuable account of Thomas's theory of cognition, "Sense, Intellect and Imagination in Albert. Thomas and Siger," in *The Cambridge History of Later Medieval Philosophy*, ed. N. Kretzmann, et al., (Cambridge: Cambridge University Press, 1982), 607. It must be noted that the phantasm also is only a likeness of the accidents of a material object. There is no sense cognition of the natures of such objects. For this point, see *Summa theologiae* I, q. 57, a. 1, ad 2.

7. The fact that Thomas reserves the term "phantasm" for the likeness existing in the imagination, cogitative power, and sense memory has been emphasized by Mahoney, "Sense, Intellect and Imagination," 607, n. 18 who also provides references to the appropriate texts.

8. *De veritate*, q. 18, a. 8, ad 5: "Intellectus autem accipit immediate non a sensibus exterioribus, sed interioribus." At *Summa theologiae* I, q. 85, a. 7, Thomas makes the important argument that the disposition of the imagination, cogitative power, and sense memory has a direct bearing on the operation of the intellect.

9. For an introductory discussion of the internal senses in Thomas, see G. Klubertanz, "The Internal Senses in the Process of Cognition," *Modern Schoolman* 18 (1941), 27-31. For some of Thomas's most extensive discussions of the internal senses, see *Quaestiones De anima*, q. 13, ad 19 and *Summa theologiae* I, q. 78, a. 4, *Summa contra gentiles*, II, c. 66.

10. *Summa theologiae* I, q. 75, a. 2, *Summa contra gentiles*, II, c. 60.

11. *Summa theologiae* I, q. 84, a. 7.

12. *Summa theologiae* I, q. 79, a. 2; *Quaestiones De anima*, q. 3. A useful discussion of the variety of operations performed by the potential intellect can be found in E. Franz, *The Thomistic Doctrine of the Possible Intellect*,

(Washington, D.C.: Catholic University of America, 1950).

13. *Summa theologiae* I, q. 79, a. 3 and a. 4; *Summa contra gentiles*, II, c. 76; *Quaestiones de anima*, q. 4.

14. See, for example, *Summa theologiae* I, q. 54, a. 4, ad 2: "Dicendum quod intellectus agentis est illuminare non quidem alium intelligentem, sed intelligibilia in potentia, in quantum per abstractionem facit ea intelligibilia in actu." For more on Thomas's theory of the agent intellect and its historical background, see E. P. Mahoney, "Themistius and the Agent Intellect in James of Viterbo and Other Thirteenth-Century Philosophers (Saint Thomas, Siger of Brabant and Henry Bate)," *Augustiniana* 23 (1973), 428-441 who also cites and discusses important secondary literature.

15. *Summa theologiae* I, q. 85, a. 1, ad 4.

16. *Quaestiones de anima*, q. 5, ad 6. Mahoney, "Sense, Intellect and Imagination," 610, n. 34, notes that Thomas sometimes uses the notion of *lumen naturale* to refer to the soul and at other times restricts it to the agent intellect.

17. Sometimes, Thomas is content to speak of the operation of the agent intellect in terms of making what is potentially knowable actually knowable. See, for example, *Summa contra gentiles*, II, c. 77: "Est igitur in anima intellectiva virtus activa in phantasmata, faciens ea intelligibilia actu; et haec potentia animae vocatur intellectus agens."

18. *Summa theologiae* I, q. 85, a. 1, ad 4: "Illuminantur quidem quia sicut pars sensitiva ex coniunctione ad intellectum efficitur virtuosior, ita phantasmata ex virtute intellectus agentis redduntur habilia ut ab eis intentiones intelligibiles abstrahantur."

19. Thomas is aware that the analogy is not exact. One disanalogy involves the fact that the light source required for vision is extrinsic to the person seeing. However, the light of the agent intellect is internal to the knower. For this point, see *Summa contra gentiles*, II, 77. Another disanalogy

involves the light source. In the case of vision, the sun is the principle from which all light flows. In the case of the agent intellect, though, the light is merely a participated light. For this point, see *Quaestio de spiritualibus creaturis*, a. 10.

20. *Summa theologiae* I, q. 85, a. 1, ad 4.

21. *Summa theologiae* I, q. 85, a. 1, ad 1.

22. *Summa theologiae* I, q. 85, a. 1, ad 3.

23. *De veritate*, q. 10, a. 6, ad 7.

24. *Summa theologiae* I, q. 84, a. 6.

25. *Quaestiones disputatae de potentia*, q. 8, a. 1: "Nam species intelligibilis, qua fit intellectus in actu, consideratur ut principium actionis intellectus, cum omne agens agat secundum quod est in actu; actu autem fit per aliquam formam, quam oportet esse actionis principium. Differt autem ab actione intellectus: quia praedicta conceptio consideratur ut terminus actionis, et quasi quoddam per ipsam constitutum." For further discussion of Thomas's theory of the concept see J. Peifer, *The Concept in Thomism*, (New York: Bookman Associates, 1952) and B. Lonergan, *Verbum: Word and Idea in Aquinas* (Notre Dame, In.: University of Notre Dame Press, 1967).

26. *Summa contra gentiles*, I, 53: "Per hoc enim quod species intelligibilis quae est forma intellectus et intelligendi principium, est similitudo rei exterioris, sequitur quod intellectus intentionem formet illi rei similem: quia quale est unumquodque, talia operatur; et ex hoc quod intentio intellecta est similis alicui rei, sequitur quod intellectus, formando huiusmodi intentionem, rem illam intelligat."

27. *De veritate*, q. 4, a. 2: "Ipsa enim conceptio est effectus actus intelligendi...."

28. *Summa contra gentiles*, IV, 11: "...inde apparet quod aliud est intelligere rem, et aliud est intelligere ipsam intentionem intellectam, quod intellectus facit dum super suum opus reflicitur...." For a good discussion of the various meanings of "reflection" in Thomas, see F. Putallaz, *Le sens de la réflexion chez Thomas d'Aquin* (Paris: J. Vrin, 1991), 117-208.

29. De veritate, q. 2, a. 5, ad 17: "...aliquid cognoscitur, secundum quod est in cognoscente repraesentatum, et non secundum quod est in cognoscente existens. ...et inde est quod non per modum quo similitudo rei habet esse in cognoscente, res cognoscitur, sed per modum quo similitudo in intellectu existens est representativa rei...."

30. *Summa theologiae* I, q. 85, a. 5: "Et similiter intellectus humanus non statim in prima apprehensione capit perfectam rei cognitionem; sed primo apprehendit aliquid de ipsa, puta quidditatem ipsius rei, quae est primum et proprium obiectum intellectus; et deinde intelligit proprietates et accidentia et habitudines circumstantes rei essentiam. Et secundum hoc necesse habet unum apprehensum alii componere et dividere; et ex una compositione et divisione ad aliam procedere, quod est ratiocinari."

31. For reasons of space, I shall ignore another important topic that involves consideration of the knowledge of material singulars. This problem involves the precise "content" of our knowledge of singulars. It is this topic that is the focus of most of the secondary literature concerning knowledge of the singular. I hope to return to this issue in the future. In addition, I make no reference to the "practical" aspects of knowledge of the singular. I shall limit my discussion to the way in which intellectual knowledge of material singulars enters into what Thomas calls "speculative" knowledge.

32. For general discussions of Thomas's theory concerning the intellectual knowledge of material singulars, see C. Fabro, "La percezione intelligibile dei singolari materiali," *Angelicum* 16 (1939), 429-462; R. Allers, "The Intellectual Cognition of Particulars," *Thomist* 3 (1941), 95-163; G. Klubertanz, "St. Thomas and the Knowledge of the Singular," *New Scholasticism* 26 (1952), 135-166; C. Bérubé, *La connaissance de l'individuel au moyen âge*, (Montreal and Paris: Presses de l'Université de

Montréal and Presses Universitaires de France, 1964); F. Peccorini, "Knowledge of the Singular: Aquinas, Suárez, and Recent Interpreters," *Thomist* 38 (1974), 606-655; A. Kenny, *Aquinas on Mind* (New York: Routledge, 1993), 111-118. It is regrettable that no discussion of this problem occurs in N. Kretzmann's useful study, "Philosophy of Mind," in *The Cambridge Companion to Aquinas* (Cambridge: Cambridge University Press, 1993). I shall follow a chronological order in discussing Thomas's texts. However I am in agreement with Bérubé, who in this case following J. Webert ("Reflexio," *Étude sur les opérations reflexives dans la psychologie de saint Thomas d'Aquin*, *Mélanges Mandonnet*, I [Louvain, 1930]) sees no important doctrinal development on this issue in the writings of Thomas. See especially Bérubé, *La connaissance*, 51.

33. *In IV Sententiarum*, d. 50, q. 1 a. 3: "Anima ergo, cum est corpori conjuncta, non cognoscit nisi per formas a rebus acceptus; et ideo per potentiam illam cognoscitivam in qua formae a rebus omnino immaterialiter recipiuntur, directe singularia non cognoscit sed solummodo per potentias organici affixas; sed indirecte, et per quamdam reflexionem, etiam per intellectum, qui organo non utitur, cognoscit singularia; prout scilicet ex objecto proprio redit ad cognoscendum suum actum, ex quo actu redit in speciem, quae est intelligendi principium; et ex ea procedit ad considerandum phantasm, a quo species huiusmodi est abstracta; et sic per phantasma singulare cognoscit." For a good analysis of this text see Bérubé, *La connaissance*, 55-56.

34. *De veritate*, q. 10, a. 5: "Sed tamen mens per accidens singularibus se immicet, in quantum continuatur viribus sensitivis, quae circa particularia versantur. ...Uno modo in quantum motus sensitivae partis terminatur ad mentem, sicut accidit in motu qui est a rebus ad animam; et sic mens singulare cognoscit per quamdam reflexionem, prout scilicet mens cognoscendo objectum suum, quod est aliqua natura universalis, redit in cognitionem sui actus, et ulterius in speciem quae est actus sui principium et ulterius in phantasma a quo species est abstracta; et sic aliquam cognitionem de singulari accipit."

35. *De veritate*, q. 10, a. 5: "Alio modo secundum quod motus qui est ab anima ad res, incipit a mente, et procedit in partem sensitivam, prout mens regit inferiores vires; et sic singularibus se immiscet mediante ratione particulari, quae est potentia quaedam individualis quae alio nomine dicitur cogitativa, et habet determinatum organum in corpore, scilicet mediam cellulam capitis."

36. *De anima*, III, 7 (431a17-b2).

37. *De veritate*, q. 2, a. 6: "Sed per accidens contingit quod intellectus noster singulare cognoscit; ut enim Philosophus dicit in III *de anima*, phantasmata se habent ad intellectum nostrum sicut sensibilia ad sensum, ut colores, qui sunt extra animam, ad visum; unde, sicut species quae est in sensu, abstrahitur a rebus ipsis, et per eam cognitio sensus continuatur ad ipsas res sensibiles; ita intellectus noster abstrahit speciem a phantasmatibus, et per eam cognitio eius quodammodo ad phantasmata continuatur."

38. *De veritate*, q. 2, a. 6: "Quod similitudo quae est in sensu, abstrahitur a re ut ab objecto cognoscibile, et ideo res ipsa per illam similitudinem directe cognoscitur; similitudo autem quae est in intellectu, non abstrahitur a phantasmate sicut ab objecto cognoscibili, sed sicut a medio cognitionis, per modum quo sensus noster accipit similitudinem rei quae est in speculo, dum fertur in eam non ut in rem quamdam, sed ut in similitudinem rei, unde intellectus noster non directe ex specie quam suscipit, fertur ad cognoscendum phantasma, sed ad cognoscendum rem cuius est phantasmata. Sed tamen per quamdam reflexionem redit etiam in cognitionem ipsius phantasmatis, dum considerat naturam actus sui, et specie per quam intuetur, et eius a quo speciem abstrahit, scilicet phantasmatis, sicut per similitudinem quae est in visu a speculo accepta, directe fertur visus in cognitionem rei speculatae; sed per quamdam reversionem fertur per eandem in ipsam similitudinem quae est in speculo."

39. *De veritate* q. 2, a. 6: "Inquantum ergo intellectus noster per similitudinem quam accepit a phantasmate, reflectitur in ipsum phantasma a quo speciem abstrahit, quod est similitudo particularis, habet quamdam cognitionem de singulari secundum continuationem quamdam intellectus ad

imaginationem."

40. I am not claiming that this is the first time Thomas uses these terms in a cognitional context. However, when discussing the problem of the knowledge of the singular in the *Commentary on the Sentences*, Thomas does not make use of this terminology, although, as I hope to show below, it was in the background of his account.

41. Bérubé, *La connaissance*, 57. Of course it is possible to work this process out consciously, since it is precisely what Thomas does when discussing this problem. However, when Thomas speaks of this reflection, it is clear, as Bérubé emphasizes, that the knowledge of the material particular is not a self-conscious act, but is simply another aspect of intellectual knowledge. B. Lonergan, *Verbum: Word and Idea in Aquinas*, (South Bend, Ind.: University of Notre Dame Press, 1967), 170-171, would, accordingly, seem to place too much emphasis on the distinction between the metaphysician's explanation of reflection and the ability of "the mass of mankind" to know material singulars. In fact, Thomas is asserting both (1) how it is possible for the average person to know particulars and (2) how we can know that it is possible. It is the *reflexio* which happens in (1) which is the basis for (2).

42. *De veritate* q. 2, a. 6, ad 3: "Non enim, proprie loquendo, sensus aut intellectus cognoscunt, sed homo per utrumque, ut patet in *I de anima*."

43. *Quaestiones de anima*, a. 20 ad 1: "Ad primum quorum dicendum est, quod anima conjuncta corpori per intellectum cognoscit singulare, non quidem directe, sed per quamdam reflexionem; in quantum scilicet ex hoc quod apprehendit suum intelligibile, revertitur ad considerandum suum actum, et speciem intelligibilem quae est principium suae operationis; et eius speciei originem; et sic venit in considerationem phantasmatum, et singularium, quorum sunt phantasmata. Sed haec reflexio compleri non potest nisi per adiunctionem virtutis cogitativae et imaginativae...."

44. *Summa theologiae* I, q. 86, a. 1: "Dicendum quod singulare in rebus materialibus intellectus noster directe et primo cognoscere non potest Indirecte autem et quasi per quamdam reflexionem, potest cognoscere

singulare, quia, sicut supra dictum, etiam postquam species intelligibiles abstraxerit, non potest secundum eas actu intelligere nisi convertendo se ad phantasmata, in quibus species intelligibiles intelligit Et hoc modo format hanc propositionem: Socrates est homo."

45. *Sentencia libri De anima*, III, 2: "Sed oportet quod alia potencia discernit esse carni, id est quod quid est carnis; set hoc contingit dupliciter: uno modo sic quod ipsa caro et quiditas carnis cognoscantur omnino potenciis ad inuicem diuisis, puta quod potencia sensitiva cognoscitur caro et potencia intellectiva cognoscitur quiditas carnis; ... alio modo contingit quod cognoscatur alio caro et quod quid est carni, non quod sit alia et alia potencia, set quod una et eadem potencia alio et alio modo cognoscit carnem et quod quid est eius; et istud oportet esse cum anima comparat universale ad singulare: ... cognoscit enim naturam speciei siue quod quid est directe extendendo se in ipsam, ipsam autem singulare per quandam reflexionem in quantum redit supra fantasmata a quibus species intelligibiles abstrahuntur."

46. In his very helpful study, F. Putallaz, *Le sens de la réflexion*, 60-63 and 118-123, argues that the notion of "reflection" with which Thomas is operating is more properly construed as "refraction" (*réfraction*). Like a reflection, this consists of a return, but only an incomplete return. Rather than being directed inward, as in a complete reflection, it is directed outward towards the exterior object that sets in motion the cognitive process. The return, then, is a return on the concrete conditions of knowing.

47. *De veritate*, q. 14, a. 1, ad 9: "Ad nonum dicendum, quod potentia cogitativa est quod est altissimum in parte sensitiva, ubi attingit quodammodo ad partem intellectivam ut aliquid participet eius quod est in intellectiva parte infimum, scilicet rationis discursum, secundum regulam Dionysii, II cap. *de divin. nomin.*, quod principia secundorum coniunguntur finibus primorum."

48. The importance of this principle for the thought of Thomas as it relates to the unity of the human has been forcefully brought out by M. Dhavamony, *Subjectivity and Knowledge in the Philosophy of Saint Thomas Aquinas*, (Rome: Gregorian University Press, 1965), 10-27. However, at no point

does he apply this principle to explicate the problem of intellectual knowledge of material singulars.

49. *Quaestio de spiritualibus creaturis*. a. 2: "Perfectissima autem formarum, id est anima humana, quae est finis omnium formarum naturalium, habet operationem omnino excedentem materiam.... Oportet quod esse animae humanae superexcedat materiam corporalem, et non sit totaliter comprehensum ab ipsa, sed tamen aliquo modo attingatur ab ea. ... Inquantum vero attingitur a materia, et esse suum communicat illi, est corporis forma. Attingitur autem a materia corporali ea ratione quod semper supremum infimi ordinis attingit infimum suprimi...ut fiat ex anima et corpore unum ex forma et materia." The central role of this passage has been stressed by Dhavamony, *Subjectivity and Knowledge*, 51. Rather surprisingly, some commentators on Thomas's account of the soul appear to see Thomas Aquinas simply as a follower of Aristotle in his account of the hylomorphic composition of body and soul. However, it is clear from passages such as this, as well as others that we shall see below, that Thomas has in fact supplemented Aristotle's basic hylomorphic view with this principle taken over from Dionysius. Two of the most recent studies on Thomas philosophy of mind, A. Kenny, *Aquinas on Mind* and N. Kretzmann, "Philosophy of Mind" make no mention of this principle when discussing Thomas's account of the relationship of soul and body.

50. See B. Montagnes, "L'axiome de continuité chez Saint Thomas," *Revue des Sciences Philosophiques et Théologiques* 52 (1968), 201-221. Montagnes provides an overview of the numerous passages in which Thomas invokes this axiom. From this list of passages, it is clear that Thomas uses several terms that we have encountered in his discussion of the knowledge of material singulars when talking about the continuity between various levels of psychological powers. Thomas uses the terms *atingere*, *coniungere*, *coniunctio*, *continuatio*, as well as *participatio* and *participare* when discussing this axiom of continuity. Other scholars have noticed the important general role this axiom plays in Thomas's account of the order of the universe. See Klubertanz, *The Discursive Power*, 155-156; E. P. Mahoney, "Metaphysical Foundations of the Hierarchy of Being according to Some Late Medieval and Renaissance; Philosophers," in *Philosophies of*

Existence: Ancient and Modern, ed. P. Morewedge, (New York: Fordham University Press, 1982), 169-172. More recently, O. Blanchette, *The Perfection of the Universe according to Aquinas*, (University Park, [PA]: Penn State University Press, 1992), 191-202, has emphasized the key role this principle plays in Thomas's account of the hierarchy of being. Particularly noteworthy for our purposes is his discussion of the relation between soul and body as an example of this continuity. Also, F. O'Rourke, *Pseudo-Dionysius and the Metaphysics of Aquinas* (Leiden: E.J. Brill, 1992), 264, accurately describes this principle as "one of the most important laws governing the hierarchy of beings." O'Rourke, in a brief discussion of the principle and its relation to the human soul, also points out that it is this continuity that allows the soul to be a form of the body. Neither of these two commentators discusses the problem of the knowledge of the singular.

51. For Dionysius's use of this principle, see *The Divine Names*, VII, 3. Good discussions of Dionysius's notion of hierarchy can be found in R. Roques, *L'univers dionysien: Structure hiérarchique du monde selon le Pseudo-Denys*, (Paris: Aubier, 1954); P. Rorem, *Pseudo-Dionysius: A Commentary on the Texts and an Introduction to Their Influence* (Oxford: Oxford University Press, 1993).

52. The influence of Dionysius and Neoplatonism in general on the thought of Thomas Aquinas has been emphasized by several scholars. The fundamental studies of C. Fabro, *La nozione di partecipazione secondo S. Tommaso d'Aquino*, 2nd edition, (Torino: Società editrice internazionale, 1950), and L. B. Geiger, *La participation dans la philosophie de S. Thomas d'Aquin*, 2nd edition, (Paris: J. Vrin, 1953) should be mentioned as important general studies. Thomas's notion of hierarchy has been usefully studied by E. P. Mahoney, "Metaphysical Foundations of the Hierarchy of Being," 166-67, 225-227, who stresses the role the thought of Dionysius has on Thomas and provides an extensive bibliography of earlier studies. In connection with the psychology of cognition, several scholars have noticed the important role that the notion of continuity has in Thomas's thought. C. Fabro, *Percepcio y pensamiento*, (Pamplona: Ediciones Universidad de Navarra, 1978), 224-231 has stressed the metaphysical foundations of the

relation between the sense powers and the intellectual powers and has pointed out the importance of Thomas's use of participation language to describe this foundation. Other scholars have noted the role that participation language and continuity play in Thomas's discussion of the relation between *ratio* and *intellectus*. See, for example, J. Peghaire, *Intellectus et ratio selon S. Thomas d'Aquin*, (Paris: J. Vrin, 1936), 179-180; Blanchette, *The Perfection of the Universe*, 267-300. Recently, D. Black, "The influence of the *De divinis nominibus*," 41-52, has pointed out the importance of certain metaphysical issues when trying to come to terms with psychological issues. She, too, is concerned with the relation between *ratio* and *intellectus* and situates this distinction within the Dionysian context of continuity. She points out that Thomas refuses "to dichotomize" *ratio* and *intellectus* on the grounds that "what is possessed by means of participation alone is never perfected nor complete in the one who merely participates." (p. 47) Also, see the study of F. O'Rourke, *Pseudo-Dionysius and the Metaphysics of Aquinas* whose monograph points out many points of contact between Thomas and Dionysius.

53. For the Latin, see *Dionysiaca. Recueil donnant l'ensemble des traductions latines des ouvrages attribués au Denis de l'aréopage* (Bruges: Desclée de Brouwer, 1937-1950) Vol. I, 407. This translation is cited and discussed by Montagnes, "L'axiom de continuité", 203.

54. Montagnes, "L'axiom de continuité", 205-208, has gathered all the passages in the works of Thomas where he speaks of the "axiom of continuity" and specifically mentions Dionysius. In these passages we find the language which we have seen applied to the problem of the knowledge of the material particular or the relation between sense and intellect. Such terms as "*attingit*," "*coniungit*" and "*continuatio*" all appear.

55. Klubertanz, *The Discursive Power*, 166-174, discusses what he calls the "dynamic relationship" between sense and intellect both in the case of the agent intellect's use of the phantasm and in the case of the intellectual knowledge of material singulars.

56. Thus Klubertanz, "St. Thomas and the Knowledge of the Singular," 148 is correct to say that *reflexio* is an essentially unhelpful notion for understanding Thomas's view in that it gives no more information than to say that it is indirect knowledge.