

PERSON,
BEING, & HISTORY

Essays in Honor of Kenneth L. Schmitz

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4. COMING-TO-KNOW AS A WAY
OF COMING-TO-BE

Aristotle's De Anima III.5

The Object of Human Knowledge

In book III, chapter 5 of the *De Anima*, Aristotle introduces the distinction between *poetikos nous* and *pathetikos nous*. The former term was not used by Aristotle himself, but gained currency later among his Greek commentators.¹ In my own treatment of book III, chapter 5, I shall employ the conventional English terms for the two forms of *nous*—active intellect and passive intellect, respectively. I believe that it is possible to make use of such terminology without adopting as a result any distorting views concerning the nature of the two forms of *nous*. While Aristotle does not consider *nous* to be limited to the human being alone (414^b18), it is quite clear that book III, chapter 5 refers to a distinction that must be made with respect to human *nous*. Finally, it should be noted that Aristotle's distinction between the active and passive intellect appears in no other part of his entire *corpus*; nowhere else in his known writings does he even allude to such a distinction. Yet as I hope shall become clear as I proceed, it would be rash to conclude on account of this that the distinction is therefore unimportant.

Any treatment of book III, chapter 5 might well begin with some ac-

1. Sir David Ross, "Introduction," *Aristotle, De Anima*, edited with an Introduction and Commentary by Sir David Ross (Oxford: Clarendon Press, 1961), 41–44.

count of the reason for the distinction that Aristotle draws therein. Aristotle begins the chapter by saying:

Since in every class of things, as in nature as a whole, we find two factors involved, a matter which is potentially all the particulars included in the class, a cause which is productive in the sense that it makes them all (the latter standing to the former, as e.g. an art to its material), these distinct elements must likewise be found within the soul (430^a10–14).²

It seems that Aristotle introduces the distinction in *nous* by reference to the notion of production, or generation, since the mind, like sense, becomes (cognitionally) the objects it apprehends (429^a15–18).³ But in order to grasp the need for Aristotle's distinction, more must be said about these objects. While the objects of sense are the sensibles (proper, common, or incidental; see II.6), the objects of the mind or intellect are what might be called the intelligibles. In book III, chapter 4 of the *De Anima*, Aristotle identifies the proper object of thought as the *ti en einai* of a thing (429^b11–23; the phrase as it is used here governs the possessive dative of the terms "magnitude" and "water"). As Hicks notes, the phrase *to ti en einai* is a technical designation of the specific form or formal cause. Like the phrase *to ti esti*, this phrase denotes specific or generic form, the rational description of which may answer the question of "ti esti?" It should be noted, however, that while the phrase *to ti esti* may designate matter and composite as well as form, the phrase *to ti en einai* denotes only the form, as opposed to the matter and the composite. Thus the objects of thought are the immaterial forms of things, or what might be called the intelligible forms of things.⁴

There remains the need for some further clarification if we are to say that the mind becomes its objects, and that its objects are the intelligible forms of things. Properly speaking, the mind does not become the intelligible form alone. For the human mind as actually knowing is

2. All direct quotations from Aristotle are taken from *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. Jonathan Barnes (Princeton, N.J.: Princeton University Press, 1984).

3. On the identity of sense and its object, see also Aristotle, *De Anima*, 418^a2 and 425^b26; on the identity of the mind and its object, see 429^b6, 430^a2, 430^a19, 431^a1, and 431^b18. On the identity of each with its respective object, see 431^b24.

4. This is corroborated in other passages throughout the *De Anima*: at 429^a15, Aristotle writes that the mind is, in a sense, the "place of forms"; at 431^b2, he tells us that the mind "thinks the forms"; and at 432^a2, he tells us that the mind is in a sense the "form of forms." It is clear, then, that the mind apprehends forms; but the phrase *to ti en einai* (as well as several other passages; e.g., 432^a2) tells us further that these are not the sensible, but the intelligible forms of things.

something that has come to be, and as such, it must contain within it an element of potentiality as well as actuality (see Aristotle's *Metaphysics*, 1032^a21 ff. and 1033^a24 ff.). Of course, it is equally improper to say that the mind becomes the intelligible object itself (432^a1). Rather, it is more accurate to say that the mind receives into itself the intelligible forms of things, and in so doing, becomes (cognitionally) the intelligibles.

Thus the mind, like sense, becomes in actual thinking the object it apprehends. But anything that is moved or comes to be must be moved or produced by something that is already in act (417^a15–18).⁵ Mind and sense, therefore, while potentially their respective objects, become their respective objects actually only in virtue of something that is already actual. In sensation, this productive actuality is external to the sensing subject; it is the sensible object itself (417^b20).

While thinking differs from sensing with respect to its objects (429^b11–23) and its passivity (429^a30–^b6), it is analogous to sensing insofar as the faculty of thinking—while potentially its objects—becomes its objects actually in the exercise of actual thinking. Since thinking is analogous to sensing in this respect, thinking must be either a process in which the mind is made to be its object by the object itself, or else a process in which some similar actuation takes place (429^a13). But the mind is not acted upon by any external object; this is because knowledge is of universals, and these exist, in a sense, in the mind itself (417^b20).⁶

This requires some further clarification. In book M, chapter 10 of the *Metaphysics*, Aristotle specifies what he means when he says that knowledge is of universals:

For knowledge, like knowing, is spoken of in two ways—as potential and as actual. The potentiality, being, as matter, universal and indefinite, deals with the universal and indefinite; but the actuality, being definite, deals with a definite object,—being a "this," it deals with a "this." But *per accidens* sight sees universal color, because the individual color which it sees is color; and this individual α which the grammarian investigates is an α . (1087^a15–21)

Knowledge of anything is knowledge of a "this" (*tode ti*); it is not actually universal, but only potentially so. For knowledge of a thing is according

5. See also 430^a21 and 431^a4. This principle is summarized, among other places, in Aristotle's *Metaphysics* at 1049^b24.

6. It is clear from 429^a15 that the sensible object cannot act upon, and therefore cannot actualize, the mind's thinking of the intelligible object. But in what follows, I hope to show why even the intelligible object outside the mind cannot in itself actualize the mind's thinking or knowing of it.

to its intelligible form (*to ti en einai*), or the source of its "thisness." As a result, knowledge of this "this" may be applied to any other "this" whatsoever. In a similar manner, sensation in its apprehension of a "this" may attain the universal *per accidens*.

The above account suggests a complete isomorphism between thinking and sensation concerning grasp of the universal (for both, such grasp is only potential). But at 417^b20 in the *De Anima*, it is clear that Aristotle wants to affirm a basic dissimilarity. Aristotle is not simply attempting to contrast here potential knowledge (which is of the universal) with actual sensation (which is of the particular). Rather, Aristotle wants to assert that actual sensation is limited in a way that actual intellectual knowing is not.

While actual sensation and actual intellectual knowledge are both of a "this," actual intellectual knowledge is accompanied by knowledge of its own potentially universal application; actual sensation is not. In book II, chapter 2 of the *Posterior Analytics*, Aristotle writes that the question, "What is X?" is equivalent to the question, "Why is X a Y?" The answer to the first question is, similarly, equivalent to the answer to the second. Thus to know what something is (*to ti en einai*) is to know also its cause for being so. Thus if one knows what an X is, he will also know why X is Y. And if one knows this, he knows by implication that in every case, if this is an X, it must be accompanied by certain other properties. Thus if any X is an eclipse, there will have to be a privation of the moon's light by the interposition of the earth. Knowledge of the cause is the knowledge of the universally applicable *as* universally applicable. To put it differently, the answer to the question *ti esti* gives one the cause as well; and knowledge of the cause entails knowledge of necessity and therefore of the possibility of the universal application. Thus to know the cause of an eclipse is to know that whenever a certain set of conditions is met, an eclipse *must* take place. And to know this is to know what may apply at any time, in any place, as long as the conditions are met.

On Aristotle's account, then, it is not plausible to hold that knowledge of what something is, and therefore of its cause, may be knowledge of the universally applicable, but not knowledge of it *as such*. As Aristotle writes, if one were on the moon and saw the earth shutting out the sun's light, one would not know the cause of the eclipse (*Post. An.* 87^b40). Nor would one know the cause if he simply perceived sensorily that a triangle has its angles equal to two right angles (*Post. An.* 87^b36). Now this is certainly knowledge of the universally applicable, but what is lacking is

the concomitant knowledge of it *as* universally applicable; and this lack, Aristotle writes, entails that there is no knowledge of the cause. The reason one would not know the cause is that one would not know anything about the phenomenon *as* universally applicable (*Post. An.* 87^b38–88^a2). So if one does not know the universally applicable *as* universally applicable, then one does not know the cause. Conversely, if one does know the cause, then one knows the universally applicable *as* universally applicable. Thus "man" and "horse" may be terms applied to individuals, though "treated" as universals (*Metap.* 1035^b30), and the same definition can be known to apply to many things (*Metap.* 1074^a35).

Thus while actual intellectual knowledge is always of a "this," it entails knowledge of its potentially universal application. The situation is different in the case of actual sensation. While actual sensation may attain the universal *per accidens*, it does not and cannot entail knowledge of this universality. For the content of sensation must always be that which is sensible at a definite place and time (*Post. An.* 87^b30). Of course, intellectual knowledge, also, is always of a "this"; but it is not knowledge merely of a "this." It is also knowledge of the cause of the "thisness" of the "this" (it is knowledge of the *ti en einai* or the intelligible form), and so it is knowledge of the "this" *as* universally applicable. The content of actual sensation, by contrast, is limited to the sensible at a definite place and time. Thus there is no knowledge in actual sensation of its potentially universal application. Even if one is speaking of actual sensation as *per accidens* universal, one is doing so, not by sensing, but by thinking.⁷

The Object of Human Knowledge and the Ground of the Distinction

For Aristotle, while actual intellectual knowledge entails knowledge of its own potentially universal application, actual sensation or sensory knowledge does not. But this shows why thinking cannot be a process in which the mind is made to be its object simply by the object itself (see 429^a13). To know by means of *nous* is to become the intelligible object cognitively. But intellectual knowledge of an object (knowledge of the intelligible form or cause) entails knowledge of the potentially universal application of this knowledge. While the object outside the mind may be actually intelligible as a single "this," it is not some-

7. The so-called "philosophic" imperfect tense of *to ti en einai* is used to express timeless being, and therefore being exempt from the contingency of matter and change. See G. R. G. Mure, *Aristotle* (London: Ernest Benn, 1932), 131n1.

thing that, in itself, stands for others of its kind; it does so only potentially. But if actual knowledge entails knowledge of its own potentially universal application, then any object outside the mind (which is always a single "this") cannot, in itself, be the cause of actual intellectual knowledge. Any object outside the mind is only potentially intelligible in the sense required. Of course, actual intellectual knowledge is also always of a "this," and so, too, is universal only in potency; but actual intellectual knowledge (as knowledge of intelligible form or cause) must also entail knowledge of this potential for universal application. Such knowledge of potential universal applicability can never be derived from any single object alone. As a result, there is needed some other actuality by virtue of which the mind actually comes to be its proper object.

The object outside the mind—while it may be actually intelligible as a single "this"—does not on its own imply anything about potential universal applicability. But since actual intellectual knowledge must entail knowledge of such potential universal applicability, no object that stands outside the mind—even if it is intelligible as a single "this" independent of the mind—can be the cause of actual intellectual knowledge. Thus knowledge, in a sense, exists in the soul itself (417^b23). Of course, it is not because we think truly about a state of affairs that a state of affairs is actually so; rather, it is because a state of affairs is actually so that we think truly about it (*Metaph.* 1051^b7–9). Thus the object outside the mind may be actually intelligible in one sense, that is, as a single "this." But since actual intellectual knowledge (as knowledge of the intelligible form or cause) entails knowledge of the potential for universal application, the object outside the mind (which is actually intelligible only as a single "this") is not actually intelligible in the sense required for actual intellectual knowledge.

Since Aristotle affirms the complete cognitional identity of the sensible object and the sensitive subject, the object that the human being has become on the sensitive level may also be actually intelligible as a single "this" (still independent of the mind). For example, the angles in the triangle that a human being now perceives (which the human being is sensorily, but not yet intellectually) may, in fact, be equivalent in measure to the sum of two right angles (see *Post. An.* 87^b36). But for a human being to become the object intellectually is for him to know the cause, and therefore to know of the potentially universal application of this knowledge.⁸ Since the object that the human being has become

8. To see the fact, yet to fail to apprehend its cause, is to fail to know the intelligible form (*to ti en einai*), and therefore is to fail to know the object intellectually.

sensorily can be actually intelligible (like any object independent of the mind) only as a single "this," it cannot be the cause of actual knowledge in the human being. For actual intellectual knowledge entails knowledge of the cause, and therefore knowledge of its universal applicability; such knowledge cannot be brought about by any single "this" alone. The sensible object that the human being is (just like the sensible object outside the mind) may be actually intelligible as a single "this." But it is knowledge of possible universal application, as we have seen, that must be included in actual knowledge of the intelligible form or cause. As a result, there is needed some further actuality that causes actual intellectual knowledge in the human being.

Actual intellectual knowledge is identical with its object (430^b21), with the difference that while the intelligible object outside the mind (as a single "this") stands potentially for all others of its kind or in its class, actual intellectual knowledge entails knowledge of such universal applicability. Such knowledge of potential universal applicability cannot be conveyed by the single object itself. This, of course, is not to deny the identity of intelligible object and intelligent subject in actual cognition. Let us call the intellectual knowledge of a thing—which entails knowledge of its potential for universal application—the knowledge of a "this" as universal (i.e., of a "this" that is "treated" as universal; *Metaph.* 1035^b30). Of course, no one has actual knowledge of a universal as such. The object outside the mind, however, while actually an intelligible "this," is a "this" as universal only potentially. On its own, it cannot convey or bring about knowledge of its own potential for universal application. Thus the object itself cannot actuate intellectual knowledge in the human being. In short, because intellectual knowledge of a thing (knowledge of the *ti en einai*, which is equivalent to knowledge of the cause) entails also knowledge of the potential for universal application, it cannot be caused by the object outside the mind (which is always a single "this"). As Aristotle writes, it is because the objects of the mind are universals that external objects cannot be the cause of actual intellectual knowledge; and for this reason, intellectual knowledge, in a sense, exists in the soul (417^b20–25).⁹

9. To know the intelligible form (*to ti en einai*) of a thing is to know its cause; and as we have seen, knowledge of this type entails knowledge of its own potentially universal application. Therefore, to say that the singular object cannot, on its own, actuate knowledge of potential universal applicability is to say that the singular object on its own cannot actuate knowledge of the cause, or knowledge of intelligible form. There must be some-

I believe that this is the sense in which one should understand the Aristotelian doctrine that the object outside the mind is only potentially intelligible (for in one sense, it is actually intelligible—as a single “this”); and the doctrine that knowledge is of universals (more accurately, one does not actually know universals, but one may know a singular “this” as universal). Finally, with this understanding, I believe that it is possible to see why there must be some prior actuality besides the object itself that “moves” the mind or intellect from a state of potentiality to a state of actuality with respect to its proper object. As we shall soon see, this prior actuality is what has been called the active intellect.¹⁰

Coming to Know as a Kind of Coming to Be

In the preceding section, I hoped to elucidate the reasoning behind Aristotle’s distinction between active and passive intellect. The question to be answered in book III, chapter 5 of *De Anima* is the following: “In virtue of what prior actuality does the mind become (cognitionally) the intelligible objects it knows?” For this reason, it seems reasonable to hold that, of the two questions Aristotle raised at the beginning of book III, chapter 4 (namely, “what is the distinguishing characteristic of the thinking faculty?” and “how does thinking come about?”), only the first is addressed in that chapter; the second question is left for book III, chapter 5. As we have already seen, the cause or agency that makes the mind its object actually cannot be the external intelligible object itself. This cause or agency, rather, is the active intellect. At this stage, I would like to examine more carefully the nature of the distinction between active intellect and passive intellect, and, in particular, how the active intellect functions in relation to the passive intellect.

As we have already seen, the distinction between the active intellect and the passive intellect is made by reference to the notion of generation

thing already actual, besides the object outside the mind, that actuates knowledge of cause (and thus of intelligible form).

10. Aristotle writes further that, since knowledge is of the universal, one may use one’s mind at will (417^b24). The reasoning, it appears, would be as follows: Since intellectual knowledge entails knowledge of its potentially universal application, once one has attained a certain kind of knowledge, it is in principle possible for him to make use of this knowledge or make an application of it in any relevant situation whatsoever. In other words, it seems that one can think at will precisely on the grounds that one can know of the potentially universal application of one’s own knowledge. Of course, this is a corollary to the assertion that, since the external object does not (and cannot) actuate knowledge, one may think at will. For the object (which is singular) does not actuate knowledge precisely because knowledge is of the universal (i.e., it is of the singular, but as universal in application).

(430^a10–14). This is because knowing is a process by which the mind becomes cognitively identical with the object it knows. It would seem reasonable, then, to pursue further discussion of the active and passive intellect also by reference to the notion of generation. Aristotle’s primary treatment of generation (or, as it is also called, coming to be, or “production” in the case of artificial processes) occurs in book Z, chapters 7–9 of the *Metaphysics*, to which we now turn.

Aristotle writes that, of all things that come to be, some come to be artificially, some naturally, and some spontaneously. The type of coming to be that Aristotle is concerned with in book III, chapter 5 of *De Anima* is the mind’s coming to be (cognitively) the object it knows. This type of coming to be cannot be considered artificial (except in the most tenuous sense).¹¹ Artificial production takes place only if there is some kind of intellectual knowledge in the soul (*Metap.* 1032^b2, 1032^b27). But the kind of coming to be that Aristotle is investigating in book III, chapter 5 is the mind’s becoming its objects cognitively; this is the coming to be of intellectual knowledge itself. So the coming to be of actual intellectual knowledge as such cannot be explained on the basis of artificial production. For any artificial production already presupposes that actual intellectual knowledge has come to be. Nor can the coming to be of actual intellectual knowledge be explained as a type of spontaneous coming to be, for spontaneous generation occurs when nature has failed in some way, as in the case of a monstrosity (*Physics* 195^b31–198^a13). Aristotle is not concerned with the anomalous in his treatment of the active and passive intellects.

The mind’s coming to be its objects cognitively is neither artificial nor spontaneous, but must be considered, it seems, natural in some sense. Thus Aristotle begins book III, chapter 5 of *De Anima* by speaking of a distinction that is to be found in every class of things, but particularly in nature (*physis*) as a whole (430^a10). Nevertheless, since natural coming to be is analogous to artificial production (*Metap.* 1034^a34), reference to the latter may help in understanding the former. It is no coincidence, then, that Aristotle draws an analogy to art at 430^a13.

Aristotle explains that everything that comes to be or is generated

11. The coming to be of intellectual knowledge may be considered an artificial process insofar as teaching, for example, is an art by which knowledge is said to be generated. But again, in the process of teaching, knowledge is generated in the student and not in the teacher; the art of teaching, like the other arts, presupposes that knowledge has already come to be in the practitioner. And this more fundamental kind of coming to be is what Aristotle is concerned with in book III, chapter 5 of *De Anima*.

(either naturally or artificially) is generated by something, from something, and becomes something (*Metap.* 1032^a13). When he says "becomes something," Aristotle means "becoming" in any of the categories: in other words, an X may come to be a particular thing or of some quantity or quality or in some place (*Metap.* 1032^a17). It is clear, then, that Aristotle's account here may also apply to the process in which the human being becomes cognitively the intelligible object he knows. In natural generation, that *from which* things are generated is called the matter, and that *by which* they are generated must be something that already exists (*Metap.* 1032^a18). As Ross notes in his commentary on the *Metaphysics*, that *by which* things are generated is not, strictly speaking, an actual thing as a composite of form and matter, but is rather the thing's nature in the sense of form. Thus, as Aristotle writes later, that *by which* a thing is produced is the form of the thing produced—that is, the "substance without matter" or essence (*to ti en einai*) (*Metap.* 1032^b11–15).

That which is generated or comes to be, Aristotle writes, "is a man or plant or one of the things of this kind, which we say are substances if anything is" (*Metap.* 1032^a20). Despite ambiguities in Aristotle's doctrine of substance,¹² it is clear that he is referring to substance as a composite of matter and form. He wrote earlier in the *De Anima* that it is the concrete body, a composite of matter and form, that is most properly called a "substance" (412^a12). Later in his account of generation, Aristotle writes that that which is generated must be a composite of matter and form (*Metap.* 1033^b13–20). His examples of "man" and "plant" at 1032^a20 serve to confirm such meaning in the present context.

That which is generated, then, is a composite of matter and form. Furthermore, the form of that which is generated is the same as that *by which* it is generated (*Metap.* 1032^a25, 1033^b30, 1034^a21). More precisely, the form of that which is generated is that *by which* it is generated. Again, I am referring to that *by which* generation takes place, not as a composite of matter and form, but as a "substance without matter," or essence (*Metap.* 1032^b11–15). Thus, that *by which* generation occurs is the efficient cause of generation, not *qua* composite, but *qua* its essence or form. For this reason, Aristotle writes that the agency *by which* generation takes place is in a sense a part of that which is generated (*Metap.* 1033^a1, 1034^a26). This is not the material part of the composite generated, but rather its formal component. Accordingly, the art of medicine is

12. See Mure, 101n1, and 179; see also Sir David Ross, *Aristotle* (London: Methuen, 1930), 165–67.

the form of health (*Metap.* 1032^b14). Furthermore, natural generation is analogous to artificial generation in this respect (*Metap.* 1034^a35). Just as *health* is said to come from "health," and "house" from "house" (*Metap.* 1032^b12), "man" may be said to come from "man" (*Metap.* 1034^b3). The efficient and formal causes of a thing in nature may coincide with one another (*Metap.* 1075^b25; *Physics* 198^a25). And so the agency *by which* a thing is generated (*qua* essence and not as a composite thing) is also the form of the thing generated.

Aristotle argues that that *by which* a thing is generated (the form) and that *from which* it is generated (the matter) cannot themselves be generated, and must preexist the act of generation itself (*Metap.* 1033^a1 ff., 1033^a28 ff., 1034^b7 ff.). Of course, both the matter and the form (as efficient cause) may be generated in the absolute sense. But both must preexist the particular instance of generation in which they play their respective roles. Were this not the case, the processes of generation would "regress to infinity" (*Metap.* 1033^b5). Furthermore, since both the form and the matter must preexist the act of generation, generation is really a process in which *this* form (which already exists in some sense) is induced in *this* matter (also preexistent) (*Metap.* 1033^b9; see also 1033^a35). The efficient cause (as the form of the thing to be generated) acts on the matter, thereby enforming it and causing it to be what it is. That *by which* generation takes place acts upon and enforms that *from which* generation takes place, and thereby produces that which is generated: the composite product.

I believe it is possible to identify, in the coming to be of knowledge, those three elements that Aristotle says are involved in any type of coming to be whatsoever. That *from which* actual knowledge comes to be (that which plays the role of matter) is what has traditionally been called the passive intellect (*pathetikos nous*). As Aristotle writes in book III, chapter 5 of *De Anima*, in all coming to be, there is something that plays the role of matter insofar as it is potentially all of the things in a particular class (430^a11). In the class of knowledge, or beings as known, the element must be passive intellect, which has the potential to become (cognitively) all things (430^a12). The agency *by which* actual knowledge comes to be is to be identified with what has traditionally been called the active intellect (*poetikos nous*). As the agency in generation, this must be something that is already in act, and that can act upon the passive intellect (the matter *from which* the thing is generated), enforming it and causing it to "become" the composite product.

That which is generated, or comes to be, in the process of knowing,

must be the mind as actually knowing, as identical (cognitionally) with its object. As in any type of generation, this must be a composite of matter and form. The matter in this case would correspond to the passive intellect, or to the capacity for becoming all things (cognitionally). The formal element in this composite must be the same in form as the active intellect that has caused it to be.

Since the passive intellect is potentially all beings (cognitionally), it is necessary that it should have no positive quality of its own. For if it did, it could not be, potentially, all things whatsoever. For just as a bitter residue on the tongue prevents one from tasting certain flavors, so too any positive quality in the passive intellect would prevent it from becoming all things whatsoever. Since, then, the mind (as potentially all things) can have no characteristic except its capacity to receive; it can have no actual existence until it thinks (429^a20–24). Until it is actually identical with the object or objects of thought, the mind (as potentially all things) is nothing (430^a1).

The foregoing, however, is in need of some clarification, for the active intellect acts on the passive intellect to make it actually identical with the object or objects of knowledge. Of course, the passive intellect upon which the active intellect acts is not yet identical with the objects of knowledge. For if it already were, there would be no need for the active intellect to act upon it. But until it is actually identical with its object, the passive intellect is nothing. The implication is that the active intellect acts upon nothing at all. One is forced into this strange conclusion, however, only if one forgets a significant distinction that Aristotle had drawn earlier in the *De Anima*. Properly speaking, it is not the soul that pities or learns or thinks, but it is the human being, by means of his soul, that does these things (408^b12–14). Accordingly, it is not the active intellect that knows or the passive intellect that knows, or even a composite of these two. Rather, it is the human being by means of these that knows. The passive intellect therefore designates a potency in the human being, and the active intellect some type of actuality. That *from which* actual knowledge is generated in the human being is the passive intellect. That *by which* actual knowledge is generated in the human being is the active intellect.

As we have already seen, both that *from which* and that *by which* generation takes place must preexist the act of generation itself. Now the type of generation we are presently concerned with is the generation of actual knowledge, the human being's coming to be (cognitionally) the

intelligible object that he knows. But how can that *from which* generation takes place (the passive intellect, which is, as of yet, nothing) preexist actual knowing? Again, it is the human being, by means of his soul, that does the knowing. The capacity for knowledge must somehow preexist *in* the human being. Now as we have already seen, knowing entails grasping the intelligible form *in* what is presented through sensation. The objects of knowledge reside potentially in the sensible forms (432^a7). Thus one cannot know anything, except through what one has experienced (see *Post. An.* 81^a38–^b10; *Metaph.* 981^a4). One cannot become (cognitionally) on the level of intelligibility what one has not already become on the level of sense. Thus, to be more specific, the passive intellect refers to a potency in the human being as *sensitively qualified*—that is, it refers to a potency in the human being who has already become the object on the level of sense. Of course, this is not to say that the passive intellect is in a human being *only insofar* as the human being is sensitively qualified: presumably there is a passive intellect (a capacity for intellectual knowing) even in the hypothetical case of a human being who has never experienced anything at all. But since there cannot be any intellectual knowing without some relevant sense experience, the passive intellect refers most properly to a potency in the human being as sensitively qualified in some way or another. Only in a remote and hypothetical sense does it refer to a potency in the human being who has not had any sense experience. The active intellect, then, does not act on nothing whatsoever, but on a potency in the human being as sensitively qualified. In the next section, I hope to shed some light on what the nature of the active intellect must be—that is, shed some light on what is meant by the pre-existent actuality *by which* knowledge is generated in the human being.

The Active Intellect As Actual Knowledge About All Being

As we have already seen, the active intellect and that which it actuates (the actually knowing *nous*, or the human being as actually knowing by the means of his *nous*) must be the same in form. The general form of the active intellect must then be in the class of *nous*; and more specifically, it must be *nous* as actual, for that which actuates must itself be in act. Now *nous* as actual is *nous* as actually knowing, and so the active intellect must be some form of *nous* as actually knowing.¹³ Since

13. This is corroborated by at least two significant passages in the Aristotelian *corpus* (see *Posterior Analytics* 71^a1 ff. and *Metaphysics* 1049^b30 ff.) Aristotle was aware that all knowledge must come from some prior form of knowledge.

nous in act is identical with its object, it would not be inappropriate to identify the active intellect, in shorthand, as a type of knowledge. In addition, it would seem that this type of knowledge must always be actual;¹⁴ for if it were not already actual, it would itself have to be actualized by something else, and this further actuality would have to be the same in form as that which is to be actualized. Thus there would be the need to postulate the existence of another active intellect to actuate this one, and so on *ad infinitum*.¹⁵ Finally, the active intellect must be knowledge about all things whatsoever. For the active intellect is that *by which* the human being becomes (cognitionally) all things (430^a15). And if the active intellect were not actual knowledge about all things, then it could not make the human being (cognitionally) all things whatsoever.

This gives rise to two questions. First of all, why would a human being need to come to know about anything at all, if he already knows actually about all things through his active intellect? And secondly, if, in fact, a human being does know actually about all things in virtue of his active intellect, how is this knowledge manifested in him? I believe it is possible to suggest answers to both of these questions by reference, again, to the notion of generation.

The passive intellect, as that *from which* things are made (the matter) (430^a11), is potentially all the different members of a given class, but actually none of them. Since the class in this case refers to the class of all beings whatsoever, the passive intellect can be in actuality nothing at all. The passive intellect refers to a potency in the human being, as sensitively qualified, to become on the level of intelligence those things he has already become on the level of sense. The active intellect, as that *by which* all things of a certain class are made (430^a12), must in some sense be the general form of those things that it makes. For health comes from health, house from house, and man from man (*Metap.* 1032^b12, 1034^b3). Since the class in this case refers to the class of all beings whatsoever, the active intellect must in some way be the general form of all beings whatsoever. Since the active intellect is a type of *nous*, it is *cognitionally* the general form of all beings; in other words, it is actual knowledge of this general form. Just as that which causes the production of any sphere

14. Aristotle makes this point explicitly at 430^a18.

15. On this matter, I am following Aristotle's own way of proceeding, suggested at 425^b12–18. There may be some operation or process that requires actuation by another, or else that in some sense must be actual in itself. If the former alternative suggests the possibility of a problematic infinite regress, then one may well assume that the operation or process in question does contain within itself the principle of its own actuation.

(whether bronze or iron or wood) must be the general form of "sphere" in the mind of the artist, so too that which makes or produces all beings (cognitionally, in the mind of the knower) must be the general form of all being as cognitional, as a type of actual knowledge.

But if the active intellect is to be identified as the actual knowledge of the general form of all beings, what, then, is this general form? What can be said of all beings whatsoever? Roughly stated, the general form of all beings is *that* they have a form. All that is, has a form. Following Aristotle, we can say that the form of something is to be identified with its intelligibility. Thus to know the general form of all beings is to know *that* they all have intelligibility. What the human being knows by means of his active intellect is that all being is intelligible.

This may help explain how a human being may already know about all things in virtue of his active intellect, but still need to come to know particular things.¹⁶ For Aristotle, the principle of individuation is matter (*Metap.* 1034^a5–8)¹⁷; so that if we have the general form of "man" and *this* flesh and *these* bones, we have Socrates and not Callias. By implication, matter is also a principle of limitation. So we may, in fact, have the general form of "man"—a form that must inhere in all men whatsoever—but if we have only *this* flesh and *these* bones, then we have only Socrates and not all men whatsoever. The same applies in the case of coming to know. In this case, the matter—and therefore the principle of individuation and limitation—is a capacity to know that resides in the human being as sensitively qualified. While the human being may know by means of his active intellect that all being is intelligible, he is sensitively qualified only in a certain way. As so qualified, the human being can come to know *this*, but not *that*. Thus one comes to know only through what one has sensed (*Post. An.* 81^a38 ff., *Metap.* 981^a4).

This general point may be illustrated by means of an analogy with artistic production. In order to make any sphere whatsoever, the artist must have in his mind (or must be intellectually informed by) the form of "sphere" in general (a form that applies to all spheres whatsoever). Still, even if the artist does know this form (or have this form in his mind), the only type of matter available to him may be *this* wood. As a result, the artist makes, not all spheres, but *this* wooden sphere.

16. If, in fact, Aristotle's doctrine of the active intellect did eliminate the need to come to know, then it would be a self-defeating doctrine. For the doctrine of the active intellect is meant (at least in part) to explain how one comes to know when he does not know already.

17. See also Aristotle, *Metaphysics* 1016^b32, 1035^b27–31, 1054^a34, 1074^a31–34, and Aristotle, *On the Heavens*, 278^a6–^b3.

Similarly, the man must know the form of all beings (he must know their intrinsic intelligibility) in order to "make himself" (cognitively and intelligently) any being whatsoever. Still, even if one does already know (by means of his active intellect) about all his beings whatsoever, he does not thereby know the particular forms of all beings; he must *come to know* with respect to any particular being. The matter that the man is (cognitively, on the level of sense), is a limiting factor. One cannot become on the intellectual level what one has not already become on the level of sense. To know the form of all spheres whatsoever is not to make all spheres whatsoever; there must also be the requisite matter, and matter is a limiting factor. Similarly, to know the form of all being whatsoever (its intrinsic intelligibility) is not to know the particular forms of all beings whatsoever.

Because it depends on sense data, actual human knowing is limited. As a result, one may know about all being whatsoever, yet still need to come to know particular beings. Still, as we shall later see, even once one has become an object on the level of sense, the mere presence of the active intellect does not guarantee that he will become the object on the intellectual level. The presence of the active intellect and sense data are necessary, but not sufficient, conditions for actual knowing.

I have identified the active intellect as the actual knowledge of the intrinsic intelligibility of all being. Yet to know the intrinsic intelligibility of all being is not to know automatically of the particular intelligibilities of all beings. This interpretation receives some indirect support from other parts of the Aristotelian *corpus*. My account has already revealed a metaphysical principle that underlies Aristotle's doctrine of the active intellect:

For from the potential the actual is always produced by an actual thing, for example, man by man, musician by musician; there is always a first mover, and the mover already exists actually. We have said in our account of substance that everything that is produced is something produced from something and by something, and is the same in species as it. (*Metap.* 1049^b24–29)

But, Aristotle notes directly afterward, this principle has given rise to a certain philosophical difficulty:

And thence arose the sophistical quibble, that one who does not know a science will be doing that which is the object of science; for he who is learning it does not know it. But since, of that which is coming to be, and, of that which, in general, is changing, some part must have changed (this is shown

in the treatise on movement), he who is learning must, it would seem, know some part of the science. It is surely clear, then, in this way, that the actuality is in this sense also, viz. in order of becoming and of time, prior to the potentiality. (*Metap.* 1049^b32–1050a3)

Just as in all becoming, there must also be in the becoming of knowledge some prior actuality, and this the same in form as that which becomes. Thus in order to learn a science, a person must in some sense already know some part of that science itself.

A more complete response to the "sophistical quibble" appears in book I, chapter 1 of the *Posterior Analytics*. Aristotle first presents the problem: "All teaching and all intellectual learning come about from already existing knowledge." (*Post. An.* 71^a1) Since all things must come from things that are already in act, and these the same in kind, one must in some sense already know what he comes to know. Before learning something, one does not already know it *simpliciter*, for then one would not really be learning it. Rather, one must know it "universally" (*Post. An.* 71^a28). Take, for example, the mathematical proposition that all pairs are even. In virtue of this proposition, one knows about all individual pairs universally, and it is this knowledge that enables him to come to know about certain pairs *simpliciter*. So even if one does not know of the existence of certain pairs, it does not follow that he does not know that all pairs are even. For what is known in the mathematical premise pertains not merely to every number and triangle that is known, but to "every number and triangle *simpliciter*" (*Post. An.* 70^b3). Thus one may know the general properties of all members of a certain class, though remain ignorant even about the very existence of certain members within that class. Aristotle concludes:

But nothing, I think, prevents one from in a sense understanding and in a sense being ignorant of what one is learning; for what is absurd is not that you should know in some sense what you are learning, but that you should know it in *this* sense, i.e., in the way and sense in which you are learning it. (*Post. An.* 70^b6–9)

If what Aristotle writes here is generalized to refer not merely to knowledge of a particular science, but to knowledge of anything whatsoever, the result will be—very roughly—what I have argued is Aristotle's doctrine of the active intellect. As I have tried to show, one may know (in virtue of one's active intellect) the general form (the intrinsic intelligibility) of all members in the class of being, yet still not know of the par-

ticular forms or even the existence of several members within that class. Thus one already knows about all beings "universally," but not *simpliciter*. While this generalization from knowledge of a particular science to knowledge of any being whatsoever is not explicit in Aristotle, I do not believe it is out of line with his thought. Again, as Aristotle writes, "All teaching and all intellectual learning come about from already existing knowledge." (*Post. An.* 71^a1). Thus even the general principles that ground the particular forms of knowledge in a certain science must themselves be derived from some other type of knowledge. And this other type of knowledge—if it is knowledge—must also be derived from some other type. This process will continue *ad infinitum* until one finally hits upon some final type of knowledge that is not itself derived from any other.

But what kind of knowledge must this final type be? This kind of knowledge, I suggest, is what one knows by means of his active intellect. It must be about all being whatsoever, if it is the kind of knowledge that all other knowledge presupposes. Furthermore, insofar as this final type of knowledge must not be derived or demonstrable from any other, it must in some sense be always actual;¹⁸ otherwise, the infinite regress would continue. Finally, while my generalization from a particular science to knowledge of any being whatsoever is not explicit in Aristotle, I do believe it is in line with the general tendency of his thought, for, as Aristotle writes, it is the distinction between knowledge of a thing universally (which must preexist) and knowledge of a thing *simpliciter* (which comes to be) that is crucial in surmounting the *aporia* in Plato: "Otherwise the puzzle in the *Meno* will result; for you will learn either nothing or what you know" (*Post. An.* 71^a30; see also 67^a21). And the problem in the *Meno* is not about the coming to be of knowledge in just any one science, but of the coming to be of any knowledge whatsoever.

Just as knowledge of any particular mathematical entity presupposes the prior and universal knowledge about all mathematical entities of that type, so too, it seems, knowledge of any particular being presupposes some knowledge of all beings whatsoever. To know the general form, or intrinsic intelligibility, of all being, however, is not to know the *forms* of all beings. It seems to follow from what has been said so far that knowledge of the intrinsic intelligibility of all being must be preconceptual and prelinguistic. For the intelligent grasp and meaningful use of concepts and words are themselves functions of one's knowledge of particular things. If knowledge of the intrinsic intelligibility of all being (by

18. Aristotle writes that the essence of active intellect is *energeia* (430^a18).

means of one's active intellect) is itself the prior condition of all such particular knowledge, then evidently it cannot itself be conceptual or linguistic. This brings us to the second crucial question posed at the beginning of this section: if, in fact, a man does know actually about all things in virtue of his active intellect, how is this knowledge manifested in him? It may be manifested linguistically or conceptually only in a derivative sense. For example, I may now express such knowledge in the direct philosophical proposition: "All being is intelligible." But presumably, one knows of the intrinsic intelligibility of all being, even before he acquires the specific ability to use such words and concepts.¹⁹ In fact, such knowledge is requisite to the acquisition and meaningful use of such words and concepts. If not through words or concepts, how is the primordial knowledge of the intrinsic intelligibility of being expressed? To this topic we turn in the next section.

Actual Knowledge About All Being and Its Expression

I would like to suggest that the knowledge of the intrinsic intelligibility of being that one has in virtue of his active intellect is expressed, not directly by means of words or concepts, but indirectly through the wonder (*thauma*) that Aristotle says is the beginning of all science and philosophy (*Metap.* 982^b12), and indeed of all intellectual knowledge whatsoever. Aristotle writes:

For all men begin, as we said, by wondering that the matter is so (as in the case of automatic marionettes or the solstices or the incommensurability of the diagonal of a square with its side; for it seems wonderful to all men who have not yet perceived the explanation that there is a thing which cannot be measured even by the smallest unit). (*Metap.* 983^a14–18)

One wonders about that for which an explanation is not yet known (in this case, for example, of automatic marionettes, the solstices, or the incommensurable diagonal). But what is presupposed in this and all wonder is that there is an explanation to be known; in other words, that all things are intelligible. Thus knowledge of the intrinsic intelligibility of all being (which one has by means of his active intellect) finds indirect expression in wonder. Since one comes to know things (even concepts and words) only by first wondering, this wonder may be both preconceptual and prelinguistic.

19. Furthermore, even if all human beings know of the intrinsic intelligibility of being in virtue of their active intellects, it is clear that not all express it in such philosophical propositions. How, then, is it expressed even in the nonphilosopher?

This is corroborated in a further passage, where Aristotle writes that wonder does, in fact, presuppose a type of knowledge: "A man who is puzzled and wonders thinks himself ignorant" (*Metap.* 982^b18). Now there can be no ignorance unless there is something to be known. And what is to be known must be knowable and therefore intelligible. Naturally, what is to be known cannot be known already *simpliciter*, for then there would be no ignorance concerning it, and therefore no need to wonder and find out. Yet while the thing to be known cannot be known *simpliciter*, there is something about it that must be known, and this is, roughly stated, that there is something *to be* known (and therefore something knowable and intelligible). Were this not known, then one would not think himself ignorant, and there would be no reason for wonder. Thus no matter how unintelligible something appears *to us* (take, for example, the case of the automatic marionettes), our wonder about it always betrays our primordial knowledge that it must in some way be intelligible *in itself* (see the *Physics* 184^a16 for this distinction). Thus when one wonders, one already knows in a way, but in another not (see, again, *Post. An.* 71^a25f.). One does not know the thing *simpliciter*; if one did, there would be no need to wonder. But one does know the thing "universally" (*Post. An.* 71^a28), as something *to be* known (as knowable or intelligible); for if this were not presupposed, there would be no wonder about it, and therefore no coming to know about it in itself.

Were it not for our knowledge of the intrinsic intelligibility of all being, we would not wonder and seek a reason for the yet unknown (for how does one know that the unknown is intelligible, if it is yet unknown?); and thus no other knowledge would come to be.²⁰ Yet while one must know of the intrinsic intelligibility of all being, it does not follow that he must know of the intelligibilities of all beings. Aristotle draws an analogy between the active intellect (what I have identified as our knowledge of the intelligibility of all being) and light at 430^a17. Light is a kind of color (418^b12) by which all other colors are mediated, but that does not contain within itself the determinations of any of the colors in the spectrum.²¹ Similarly, knowledge of the intrinsic intelligibility of all being (the active intellect) is a type of knowledge by which all other knowledge is mediated, but that does not contain within itself the deter-

20. This is confirmed by the last line of *De Anima* III.5 (430^a25), if one accepts the last of the four possible renderings that Sir David Ross suggests: "and without the active reason nothing knows"; see his Ross, *Aristotle*, 152.

21. This, of course, is according to Aristotelian physics.

minations of any particular knowledge. Thus one may know the general form of all being without knowing the forms of all beings. Furthermore, just as the presence of light is the necessary but not sufficient condition for the actualization of color, so too the presence of the active intellect (actual knowledge of the intelligibility of all being) seems to be necessary but not sufficient for the actualization of particular forms of knowledge. Finally, we do not see the light directly, but see it only indirectly by seeing other colors mediated through it. Similarly, we do not know directly of the intelligibility of all being; we do not begin with the formally expressed premise that all being is intelligible, then deduce other knowledge from it. Rather, we come to know several particular things first (by means of the active intellect), then discover only later that this particular knowledge presupposes the more fundamental knowledge of the intelligibility of all being.

As we have seen, the fundamental expression of one's knowledge of the intrinsic intelligibility of being is not conceptual or linguistic. For knowledge of the intrinsic intelligibility of being is the prior condition of the coming to be of all particular forms of knowledge, and the proper use of words and concepts is possible only if some particular knowledge has already come to be. Thus, knowledge of the intrinsic intelligibility of all being precedes all words and concepts. I have therefore suggested that one's knowledge of the intrinsic intelligibility of being is expressed only indirectly through one's wonder. One does not wonder and seek reasons unless he knows already that there is something to be known. Furthermore, while knowledge of the intrinsic intelligibility of being is not expressed fundamentally in words or concepts, one may, with time, acquire the words and concepts necessary for giving direct expression to such knowledge. Finally, while wonder (as the indirect expression of the knowledge of the intrinsic intelligibility of all being) may itself be caused (*Mechanics* 847^a11), such knowledge itself is neither derived nor demonstrable nor caused. A person's wonder is compelled by those things that seem unintelligible to him; but one would never be so compelled to understand unless he first knew that—no matter how unintelligible things seemed to him—they are intelligible in themselves.

Two Possible Objections

I shall dedicate the final section of this chapter to anticipating what I consider might be two very reasonable objections to my account thus far. I argued in the last section that our wonder about things presuppos-

es and thereby gives indirect expression to our knowledge of the intrinsic intelligibility of being. Of course, one may argue that, in wondering, one does not *know* of, but one merely expresses some sort of *faith* in, the intrinsic intelligibility of being. Of course, I have not tried to suggest that our wondering alone is sufficient to demonstrate our knowledge of the intrinsic intelligibility of being; such knowledge is only expressed (indirectly) in such wonder. Nevertheless, I believe that there are sufficient passages in the Aristotelian *corpus* to support the claim that, in wondering, one not only anticipates, but actually *knows* (in a primordial and underived way) of the intrinsic intelligibility of being.

The principle that all being is intelligible seems for Aristotle to entail, and to be entailed by, the principle of noncontradiction. Now all being is intelligible if and only if all beings have a form; for Aristotle identifies the form of a thing with its intelligibility. Furthermore, there is form if and only if there is definiteness; for Aristotle, the "definite" is the formal cause. Now for Aristotle, the principle of noncontradiction applies once there is something "defined" or "definite" (where there is form) (*Metap.* 1006^b1, 1006^b4, 1008^a34). Conversely, where there is only indefiniteness (i.e., only matter and therefore no form), the principle of noncontradiction does not apply, and there can be no possibility of meaningful dialogue (*Metap.* 1006^b6–7). By the logical operation of transportation, this latter assertion is convertible to the proposition that, if the principle of noncontradiction applies, then there is definiteness and therefore form. Thus if the principle of noncontradiction applies, there is form (intelligibility); and if there is form (intelligibility), the principle of noncontradiction applies. Thus the principle of noncontradiction applies if and only if the things under discussion are intelligible. By implication, the principle of noncontradiction applies universally if and only if all beings are intelligible.²²

For Aristotle, it is clear that the principle of noncontradiction is not demonstrable nor—strictly speaking—need it be so (*Metap.* 1006^a8–12). For anyone who attempts to deny it must implicitly affirm it, even in his denying; as soon as the skeptic says anything he takes to be meaningful, he has already confirmed the principle (*Metap.* 1006^a13). Since the principle of noncontradiction cannot be denied with self-referential consistency, it is self-evident (*Metap.* 1006^a12). There can be no demonstration of this principle, nor need there be. In fact, any demonstration of any

22. On form as the basis of the principle of noncontradiction, see Joseph Owens, *The Doctrine of Being in the Aristotelian Metaphysics* (Toronto: Pontifical Institute of Medieval Studies, 1951), 166–67.

truth whatsoever already presupposes the truth of this principle (*Metap.* 1006^a22). By implication, to know that the principle of noncontradiction applies in some case, is to know of some definiteness, form, or intelligibility. Furthermore, since one knows primordially that the principle of noncontradiction applies universally, one knows primordially that all being is intelligible. Since this is a type of knowledge that can have no demonstration and that needs no demonstration, it is a type of knowledge that is in some sense always actual; furthermore, it is presupposed by all other forms of knowledge.

Thus when one wonders, one not only assumes, but one also knows of the intrinsic intelligibility of all being. In one's questions, one not only anticipates intelligibility, but one knows that there is some intelligibility to be grasped. This is not to say, of course, that a *particular* intelligibility anticipated by a certain question will necessarily be discovered. Questions, and indeed entire research projects, may be misguided, wrong-headed, ill-informed. But even if a particular anticipated intelligibility is not discovered, it does not mean that there is no intelligibility to be discovered at all. While certain anticipated intelligibilities may be doubted, what is not doubted is the intrinsic intelligibility of being itself. (Such cannot be doubted with self-referential consistency, since for Aristotle, to doubt this is to doubt also the principle of noncontradiction). One might say that the principle of noncontradiction and the intrinsic intelligibility of being are known self-evidently.

I believe that this is Aristotle's meaning when he writes that the active intellect "is in its essential nature activity" (430^a18). It is clear that he does not mean that one must always cogitate or think (see 430^a7 and *Metap.* 1072^b24). Rather, he seems to mean that the knowledge we have of the intrinsic intelligibility of being (which is to be identified with the active intellect) cannot and need not be demonstrated. Insofar as such knowledge cannot be caused or induced, it is always actual. Any other rational demonstration presupposes such knowledge. This, of course, does not mean that one must always think, but rather that one cannot think without presupposing this kind of knowledge. So as long as one is in a position to know anything (i.e., as long as one is conscious and intellectually aware), he must know—however inexplicitly—that all being is intelligible. Without this underived type of knowledge, no other knowledge would come to be.²³

23. Again, this is corroborated if one accepts the last of Ross's four possible renderings of 430^a25: "and without the active reason nothing knows"; see note 20, above.

A second possible objection to my account concerns whether the active intellect should be identified as the efficient cause of the coming to be of knowledge. In my account, I have consciously resisted such an identification.²⁴ I have noted in several places that the presence of the active intellect seems to be a necessary but not sufficient condition for the actualization of knowledge. I have shown that the presence of an appropriate sense content is also a necessary condition in the coming to be of knowledge. But even when the requisite sense content or image is present, along with the active intellect, still no actual knowledge is guaranteed. Thus one may know already that all being is intelligible, and in virtue of this knowledge wonder and ask questions about the image or sense data before him, yet still fail to achieve the desired increment in knowing. One may have already become an object on the level of sense, and may already know (by means of active intellect) that all being is intelligible; but one may still be unable to have the relevant insight or become the object on the intellectual level. Thus even the simultaneous presence of the active intellect and the relevant image is only a necessary, but not quite sufficient condition for the occurrence of actual understanding (or specific intellectual knowing). Just as the presence of light is a necessary but not sufficient condition for the actualization of a particular color, so too, it seems, the presence of the active intellect is a necessary but not sufficient condition for the occurrence of actual understanding.

In spite of my refusal to identify the active intellect explicitly with the necessary and sufficient condition of one's coming to know, one might object that my heavy reliance on the notion of generation may betray this basic intention. For in Aristotle's writing on generation (*Metaph. Z.7-9*, esp. 1034^a22-1034^b8; also the *Physics* 198^a25), the efficient cause (in both natural and artistic production) is identified with the final and formal cause. It would appear, then, that the necessary and sufficient condition for the coming to be of knowledge would be the presence of the active intellect (the formal, final, and efficient cause) in the man as sensitively qualified and possessed of a passive intellect (the matter, or material cause). Of course, this conclusion stands in direct contradiction with the conclusion suggested by the light analogy.

I believe there is no real contradiction here if a crucial distinction is kept in mind. As John Rist writes:

24. Joseph Owens offers some good reasons for resisting such an identification. See "Aristotelian Soul as Cognitive of Sensibles, Intelligibles, and Self," in *Aristotle: The Collected Papers of Joseph Owens*, edited by John R. Catan (Albany: State University of New York Press, 1981), 96.

As we know from the *Metaphysics* (1071^a20-22), Man is the father of man, but there is no such existent as Man. Rather we should say that Peleus is the father of Achilles. Similarly Art is not the efficient cause of the sculpturing of a block of marble into the form of a statue. The cause is rather the particular form of the statue in the mind of the sculptor who is the efficient cause of the product.²⁵

Thus the efficient cause and sufficient condition of the production of the artwork are not merely an idea in the mind of the artist, but rather this idea in the mind of this particular artist. With this sort of qualification, it becomes possible to include further determinations that would make the idea in the artist's mind both the necessary and sufficient condition for artistic production. For example, presupposed in such artistic production is an appetitive element. As Aristotle writes in the *De Anima* III. 9, knowledge itself is not a sufficient condition for motion in the individual; and disease can be produced by the medical art no less than health can. (*Metaph.* 1032b2-4) So it is not merely the idea per se in the mind of the artist that is the efficient cause of the artistic production, but this idea in the mind of this artist, as so predisposed appetitively. Such will guarantee the appropriate action. Thus a valid practical syllogism will "force" the relevant action (see *Mov. An.*, ch. 7). It is not, then, merely the idea in the mind of the artist that is the efficient cause of the artistic production; rather it is this idea in the mind of this artist who is predisposed appetitively in this way. In the artist in whom such appetitive conditions already exist, an idea may become the efficient cause of artistic production; in itself, the idea (like light) remains a necessary but not sufficient condition.

In a similar way, the active intellect alone is not the efficient cause of the occurrence of knowing in the man. Rather, the efficient cause is the active intellect in *this* man, who is already predisposed sensitively and intellectually in a certain way. With this sort of qualification, it becomes possible to include other factors that would then make the active intellect not only the necessary but also the sufficient condition for the actualization of knowledge in the individual. As we have already seen, the idea in the mind of the artist is not automatically the efficient cause of the artwork. So, too, the active intellect is not automatically the efficient cause of knowing in the thinker who is already (cognitively) the object

25. John M. Rist, "Notes on Aristotle's *De Anima* 3.5," *Classical Philology* 61 (January 1966): 8. While I believe Rist is correct about this, I am not convinced that he can be so certain with regard to his conclusions about the immanence of the active intellect. Of course, a rigorous treatment of this issue is well beyond the scope of the present effort.

on the level of sense. Certain other conditions must be fulfilled in the man if the active intellect is to become the efficient cause of his knowing. But once those conditions are fulfilled, the active intellect does become the sufficient condition for his knowing. Like light, the active intellect is not automatically a necessary and sufficient condition. But in a man predisposed properly, it *can* be such. As a result, when light does, in fact, actualize certain colors, it may be called the efficient cause of such actualization. But it is not called so *qua* light alone; it is the efficient cause as light in *this* circumstance.

A final question then remains: what is the prior condition in the man that must be fulfilled if the active intellect is to be the efficient cause of knowledge in him? In other words, how must *this* man be qualified if the active intellect is to be the efficient cause of knowledge in him? As already noted, being sensitively qualified alone cannot suffice; for one may be perceiving the requisite image, yet still fail to understand it on the intellectual level. I believe that an answer is suggested in the *Metaphysics*, book IX, chapter 9. There Aristotle writes that the proper alignment of the image in the man as sensitively qualified will guarantee that understanding will take place: "If, then, the line parallel to the side had been already drawn, the theorem would have been evident to anyone as soon as he saw the figure." (*Metap.* 1051^a26) In practical action, one's desires must be aligned properly; and so too in knowing, the image must be aligned properly. Once the relevant elements in an image are arranged in a suitable constellation, the act of understanding cannot but take place.

Of course, what constitutes a properly aligned image will vary with each individual and will depend—in part—on how much the individual already knows. Thus one cannot prescribe in any universal fashion what the necessary and sufficient conditions will be for the occurrence of acts of understanding in human beings. Furthermore, what an individual already knows will determine to some extent how successful he will be in aligning an image in his mind's eye, so that the image is most conducive to new acts of understating. Accordingly, one's previous acts of knowing make possible still further development in one's knowing, and there arises the possibility of geometric (and not merely arithmetic) progress in one's knowing. As Aristotle illuminatingly writes: "For it is owing to their wonder that men now begin and at first began to philosophize; they wondered originally at obvious difficulties, then advanced little by little and stated difficulties about the greater matters" (*Metap.* 982^b12).

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5. REVISITING ANSELM'S ONTOLOGICAL ARGUMENT

There is something beguiling about Anselm's argument for the existence of God. By combining a negation with a comparison, it creates a definition that is both subtle and ambiguous. By telling us more about what God is not than about what he is, it bears a whiff of Eastern negative theology. And the delicate relationship between thought and existence, between concept and reality, carries within it the ongoing puzzle about how our (very human) reflections and theoretical constructions could possibly lead us to conclusions about what the world is really like, beyond all appearances.

Intrigued by these considerations, it is tempting to attempt a rethinking of the argument to see whether it can bear the weight that Anselm puts upon it: can we in fact be driven to conclude that God exists simply on the basis of a definition? One such attempt will be the focus of this paper. We shall start from the crucial definition of the deity, upon which every step of the reasoning hangs, and explore possible meanings that might unfold its full potential.

"We believe," writes Anselm, "that thou art a being than which none greater can be thought."¹ The original does not have that question-begging term "being," but rather a much more innocuous "something":

1. I am using Anselm, *Proslogion*, tr. Eugene Fairweather, in *The Library of Christian Classics*, vol. 10, *A Scholastic Miscellany: Anselm to Ockham* (Philadelphia: Westminster Press, 1956), 73.